Final Decision on Proposed Revisions to the Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline

Submitted by

DBNGP (WA) TRANSMISSION PTY LTD

Economic Regulation Authority
WESTERN AUSTRALIA

2 November 2005

CONTENTS

DECISION

1. On 21 January 2005, DBNGP (WA) Transmission Pty Ltd ("**DBP**") submitted proposed revisions to the Access Arrangement ("**Proposed Access Arrangement**") for the Dampier to Bunbury Natural Gas Pipeline ("**DBNGP**") to the Economic Regulation Authority ("**Authority**") for approval under the *National Third Party Access Code for Natural Gas Pipeline Systems* ("**Code**").

2. On 11 May 2005, the Authority issued its Draft Decision on the Proposed Access Arrangement. The Draft Decision was to not approve the Proposed Access Arrangement and the Authority indicated 22 amendments to the Proposed Access Arrangement that would have to be made before it would be approved.

3. Under section 2.37A of the Code, DBP had an opportunity to resubmit the Proposed Access Arrangement subsequent to the Draft Decision, revised to incorporate or substantially incorporate the amendments specified by the Authority in its Draft Decision or otherwise address the matters the Authority identified in its Draft Decision as being the reasons for requiring the amendments. DBP has elected not to do so and, accordingly, this Final Decision is issued under section 2.38(a) of the Code and relates to the Proposed Access Arrangement as submitted by DBP on 21 January 2005.

4. The Authority has considered the Proposed Access Arrangement under the principles set out in the Code. In doing so, the Authority has considered and weighed the factors in section 2.24 of the Code as fundamental elements and took into account the provisions of the Current Access Arrangement in making the overall decision whether to approve the proposed revisions to the Access Arrangement.

5. The Authority does not approve the Proposed 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 set out in this document.

6. Under section 2.38(a)(ii) of the Code the Authority is required, when issuing a Final Decision that does not approve revisions to an Access Arrangement, to state amendments that would have to be made to the revised Access Arrangement in order for the Authority to approve it. For purposes of clarity, the required amendments are stated in the reasons for this Final Decision at the point at which the relevant element of the Proposed Access Arrangement is addressed. A consolidated list of required amendments is provided at the end of the statement of reasons.

7. The Authority is also required by section 2.38 of the Code to state the date by which amended revisions to the Access Arrangement must be submitted to the Authority. In accordance with section 2.38, DBP must submit amended revisions to the Access Arrangement to the Authority by 4 pm on Wednesday 30 November 2005.

REASONS

Introduction

8. The DBNGP consists of the gas pipeline system as described by Western Australian pipeline licences WA: PL 40, WA: PL 41 and WA: PL 47. The pipeline system comprises 1845.3 km of high-pressure gas pipeline (including laterals) linking gas

suppliers in the north west of Western Australia with markets principally in the south west of the State.

9. The DBNGP is operated by DBP and is owned by DBNGP (WA) Nominees Pty Ltd as trustee for the DBNGP WA Pipeline Trust.

10. An Access Arrangement for the DBNGP was approved by the then Western Australian Independent Gas Pipelines Access Regulator on 29 December 2003 ("**Current Access Arrangement**"). The functions of the Independent Gas Pipelines Access Regulator passed to the Authority on its establishment on 1 January 2004.

11. Under the Current Access Arrangement, revisions to the Access Arrangement were to be submitted to the Authority on 1 April 2004. However, the Authority granted extensions of time for submission of revisions to 15 January 2005. After the Authority refused to grant a further extension of time beyond this, DBP submitted the proposed Access Arrangement on 21 January 2005.

Access Arrangement Documents

12. DBP submitted the following documentation as its Proposed Access Arrangement and supporting documentation:

- Proposed Revised Access Arrangement (public and confidential versions);
- Proposed Revised Access Arrangement Terms and Conditions (public and confidential versions);
- Proposed Access Arrangement Information (public and confidential versions);
- Annexure A, Description of Gas Transmission System to Proposed Access Arrangement Information (public and confidential versions); and
- Dampier to Bunbury Natural Gas Pipeline Maps (confidential version).

13. In addition to the documents that make up the Proposed Access Arrangement and Access Arrangement Information, DBP has made a number of submissions to the Authority in which it has sought to provide explanatory and supporting information for the Proposed Access Arrangement.

14. Copies of these documents (except for confidential material) are available from the Authority or may be downloaded from the Authority's web site (www.era.wa.gov.au).

15. On 14 March 2005, the Authority issued a Notice advising that pursuant to section 2.30 of the Code the Authority had determined that the Access Arrangement Information submitted by DBP did not comply with requirements of the Code. Accordingly, the Authority advised DBP that the Access Arrangement Information submitted on 21 January 2005 must be amended to comply with the Code and that the revised Access Arrangement Information was required to be submitted to the Authority on 22 March 2005.

16. The Authority received the revised Access Arrangement Information on 22 March 2005. The Authority was not satisfied that the revised Access Arrangement Information met the requirements of the Code and, on 23 March 2005, the Authority issued a further Notice advising that the Authority anticipated that the further revised

Access Arrangement Information compliant with the Code would be submitted by DBP in April 2005. This was not submitted.

17. As the Authority did not wish to delay the process in relation to the consideration of the Proposed Access Arrangement, the Authority took the course of publishing the Draft Decision on the basis of the existing Access Arrangement Information. Subsequent to issue of the Draft Decision, DBP provided a further revised Access Arrangement Information to the Authority on 2 June 2005. This revised Access Arrangement Information provided additional information on New Facilities Investment that is material to the Authority's Final Decision. The Authority made the revised Access Arrangement Information publicly available and invited and received submissions from interested parties on the revised forecast of New Facilities Investment.

18. During the course of preparing this Final Decision, the Authority noticed that there were a number of inconsistencies between the information provided in the revised Access Arrangement Information submitted on 2 June 2005 and a financial model separately provided by DBP to the Authority and detailing the calculation of DBP's proposed Reference Tariff. After the Authority drew these inconsistencies to the attention of DBP, DBP submitted a further revised Access Arrangement Information to the Authority on 18 August 2005. The Authority has based its assessment of the Proposed Access Arrangement on this latest revision of the Access Arrangement Information. This latest revision of the revised Access Arrangement Information is publicly available on the Authority's website.

19. In forming its Final Decision, the Authority has considered submissions made on the Proposed Access Arrangement and on the Draft Decision (including submissions on the revised Access Arrangement Information). In addition to submissions from DBP, the following parties made submissions on the Draft Decision and in response to calls for submissions on gas quality and the part haul and back haul cost allocation methodology.[1]

- North West Shelf Gas ("**NWSG**")
- Western Power Corporation ("**Western Power**")
- BHP Billiton
- Nickel West
- CSBP
- Wesfarmers LPG
- Western Mining Corporation
- Apache Energy
- Birla Nifty Pty Ltd
- Australian Pipeline Trust
- Origin Energy

[1] ERA notice of 3 October 2005 and request for comment on gas quality.

Requirements of the Code

20. Under section 2.46 of the Code, the Authority may approve proposed revisions to an Access Arrangement only if it is satisfied that the Access Arrangement as revised would contain the elements and satisfy the principles set out in sections 3.1 to 3.20 of the Code. In assessing proposed revisions to the Access Arrangement, the Authority must take into account the factors described in section 2.24 of the Code and the provisions of the Current Access Arrangement.

21. The factors described in section 2.24 comprise:

    (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.

22. The "elements" of an Access Arrangement set out in sections 3.1 to 3.20 of the Code comprise:

    - 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 Date (sections 3.17 to 3.20 of the Code).

23. An Access Arrangement may deal with a number of matters beside those dealt with in sections 3.1 to 3.20, but an Access Arrangement must contain at least the elements dealt with in sections 3.1 to 3.20 and satisfy the principles set out in those sections.

24. In applying the Code to its consideration of DBP's Proposed Access Arrangement, the Authority has taken into account relevant judicial and other decisions, such as those by review bodies, relating to the Code.

25. The remainder of these reasons set out the Authority's considerations in respect of each of the elements of the Proposed Access Arrangement.

Services Policy

Requirements of the Code

26. Section 3.1 of the Code requires that an Access Arrangement include a policy on the Service or Services to be offered (a Services Policy). 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.

27. The Access Arrangement must specify the 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).

28. 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.

29. As indicated in section 3.3(a) of the Code, an Access Arrangement must include at least one Reference Service. The Authority may require the Access Arrangement to include additional Reference Services if such Services are likely to be sought by a significant part of the market. For Services other than Reference Services (that is, Non-Reference Services), tariffs (along with terms and conditions) are to be determined by negotiation between the Service Provider and the Prospective User, and section 6 of the Code provides a process of arbitration should negotiations be unsuccessful.

Proposed Revisions to the Services Policy

30. A Services Policy is provided in section 6 of the Proposed Access Arrangement.

31. The Current Access Arrangement for the DBNGP distinguishes between a Reference Service and a range of Non-Reference Services. The Services Policy of the Current

Access Arrangement commits the Service Provider to making available a single Service (the "**Firm Service**") to Prospective Users as a Reference Service. The Firm Service has the following general characteristics.

- The pipeline is divided into 11 zones, referred to as Zones 1 to 4, 4a and 5 to 10. The Firm Service is a Service under which gas may be received into the pipeline at a Receipt Point in any zone and delivered to a Delivery Point in any zone, with the tariff payable for the Firm Service dependent upon the number of zones and number of compressor stations between the Receipt Point and the Delivery Point.
- The Firm Service can involve either forward-haul or back-haul of gas.
- The Firm Service is not subject to interruption or curtailment except as permitted by the Access Contract.
- The minimum contract term is two years, where the application for the Firm Service is for utilisation of Spare Capacity, or 20 years, where the application for the Firm Service is for utilisation of Developable Capacity.

32. The Current Access Arrangement also provides for eight Non-Reference Services:

- Secondary Market Service;
- Park and Loan Service;
- Seasonal Service;
- peaking service;
- metering information service;
- pressure and temperature control service;
- odorisation service; and
- co-mingling service.

33. The Non-Reference Services under the Current Access Arrangement also include Services provided by the pipeline owner under contracts entered into prior to commencement of the first Access Arrangement Period.

34. The Services Policy of the Proposed Access Arrangement describes a different Reference Service, the "**Tf Service**". There are a number of material differences in broad characteristics of the Firm Service and the Tf Service, evident from both the descriptions of the Services and the Services Policy and key terms and conditions for each Service as set out in the Current and Proposed Access Arrangements in accordance with the requirement of section 3.6 of the Code. The material differences between the Tf Service and the Firm Service are as follows.

- The Tf Service is a "full haul" Service for the transport of gas to locations downstream of compressor station CS9 of the pipeline and the same Reference Tariff applies to any location of gas delivery. Unlike the Firm Service, the Tf Service does not include provision for the "Part Haul" transport of gas to locations upstream of compressor station CS9, or for "Back Haul" of gas.

- The minimum contract term for the Tf Service, where the Service is to be provided by use of Spare Capacity, is five years; whereas the minimum contract term for the Firm Service in the same circumstances is two years.

- There are substantial differences between the two Services in provisions for interruption and curtailment, with substantially greater scope under the Tf Service for interruption and curtailment without liability to DBP.

35. The Services Policy of the Proposed Access Arrangement makes provision for a similar range of Non-Reference Services as is in the Current Access Arrangement, with changes comprising:

- inclusion in the Proposed Access Arrangement of a Part Haul Service and Back Haul Service (which would no longer be provided as part of the Reference Service);

- a change in the spot market service from the "Secondary Market Service" of the Current Access Arrangement to the "Spot Capacity Service" of the Proposed Access Arrangement; and

- the absence of provision in the Proposed Access Arrangement for revenue from certain Non-Reference Services to be rebated to Users of the Reference Service.

36. In assessing the proposed Services Policy, 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. Of these Services, only one that is sought by a significant part of the market need be specified as the Reference Service, although the Authority must consider whether any other Services that are likely to be sought by a significant part of the market should also be included as a Reference Service.

37. Because the Proposed Access Arrangement includes the Tf Service as the only Reference Service, the Authority needs to consider:

- whether the Tf Service is a Service likely to be sought by a significant part of the market;

- whether there are other Services that should be described in the Access Arrangement; and

- if so, whether any of those Services should be included as a Reference Service.

38. These matters are addressed in turn, below, indicating the Authority's consideration of each matter in its Draft Decision and further consideration, taking into account submissions received on the Draft Decision.

Is the Tf Service likely to be sought by a significant part of the market?

Characteristics of the Tf Service

39. The Tf Service has the following general characteristics.

- The Tf Service is a "Full Haul" Service under which DBP takes receipt of gas into the DBNGP at a Receipt Point and delivers that gas to one or more Delivery Points at a location downstream of Compressor Station 9.

- The obligation of DBP to take receipt of gas into the DBP on a Day is limited to the User's MDQ plus or minus the quantity of gas required to correct any Imbalance on the preceding Day.

- The obligation of DBP to deliver gas at a Delivery Point is limited to the User's MDQ.

- The Tf Service cannot involve Back Haul of gas.

- The Tf Service is provided subject to the availability of Capacity, and without interruption or curtailment except as permitted by the Access Contract.

- Where a Prospective User's request for the Tf Service may be provided by use of Spare Capacity, the minimum contract term is five years unless otherwise agreed to by DBP at DBP's absolute discretion.

- Where a Prospective User's request for the Tf Service may be provided by use of Developable Capacity, the minimum contract term is 20 years unless otherwise agreed to by DBP at DBP's absolute discretion.

Draft Decision

40. In assessing whether a Service is likely to be sought by a significant part of the market, the Authority is required to determine whether the nature of the Service described in the Access Arrangement, considered in the context of the range of Services that might be provided using the pipeline, is likely to be sought by a significant part of the market. It is not necessary for the Authority to consider whether there is significant demand for a proposed Reference Service on the precise terms and conditions proposed for that Service, which is a matter for consideration under section 3.6 of the Code. However, consideration of the terms and conditions may be appropriate to some extent in order to determine the general nature of the Service proposed to be provided under the Access Arrangement.

41. With respect to the Tf Service, a number of Users of the DBNGP submitted to the Authority that no significant part of the market for gas transportation in the DBNGP is likely to seek a Service in the nature of the Tf Service and that, therefore, the Tf Service does not satisfy the requirement of the Code that the Access Arrangement include a Reference Service that is likely to be sought by a significant part of the market. The reasons given in submissions include:

    - the proposed Tf Service is a fully interruptible Service and for that reason it is not a Service likely to be sought by a significant part of the market;[2]

    - the proposed Tf Service is different to the Service for which existing Users of the DBNGP entered into contracts during contract re-negotiations in late 2004 and

[2] Newmont Australia Limited, CSBP, Western Power.

which is likely to be sought in the future by exercise of options to obtain additional capacity under the same terms as for currently contracted capacity;[3] and

- the proposed Tf Service could not be "bundled" with Non-Reference Services to form a Service that would be sought by a significant part of the market.[4]

42. In forming its Draft Decision, the Authority considered the claims made in submissions that the Tf Service is in the nature of a fully interruptible Service. In this regard, the Authority noted that clause 6.2 of the Proposed Access Arrangement indicates that the Tf Service would be provided by DBP to a User "without interruption or curtailment except as permitted by the Access Contract". The extent of interruption or curtailment that would be permitted under an Access Contract for the Tf Service is set out in clause 14 of the Access Contract Terms and Conditions as follows:

> 14. CURTAILMENT AND INTERRUPTION
>
> 14.1 Permissible Interruption
>
> Operator may curtail or interrupt Shipper without liability to Shipper:
>
> (a) where the duration of the curtailment together with the aggregate duration of all other curtailments of the Tf Service during the Year (other than curtailments or interruptions permitted under clause 14.1(b)) does not cause the Permissible Limit to be exceeded; and
>
> (b) in any of the following circumstances:
>
> (i) in such circumstances as Operator considers necessary as a reasonable and prudent pipeline operator, including for Planned Maintenance and Major Works;
>
> (ii) in order to comply with obligations under any prior contract or any contract which is subject to curtailment or interruption only after the curtailment or interruption of the Tf Service;
>
> (iii) if there is an event of Force Majeure where Operator is the affected party;
>
> (iv) in the circumstances described in clause 3.10(d); or
>
> (v) by reason of, or in response to a reduction in Capacity caused by the default, negligence, breach of contractual term or other misconduct of Shipper.
>
> 14.2 Operator must provide Shipper with reasonable, and in any event not less than 3 Days, prior written notice of all Planned Maintenance that may reasonably be considered likely to interrupt normal gas transmission.
>
> 14.3 Non Permissible Interruption
>
> Operator may curtail or interrupt Shipper in circumstances which are not a Permissible Interruption provided that in that case, Operator shall:
>
> (a) compensate Shipper for any Direct Damage suffered by Shipper; and
>
> (b) credit Shipper in the next invoice issued by Operator to Shipper, with the Capacity Charge applicable to that capacity so interrupted or curtailed.

[3] Worsley Alumina Pty Ltd, Western Power.

[4] Western Power.

43. The Authority noted in its Draft Decision that, while sub-clause 14.1(a) of the Access Contract Terms and Conditions establishes a "Permissible Limit" to interruptions and curtailments of the Tf Service, there is a wide range of circumstances set out in sub-clause 14.1(b) in which the Tf Service may be curtailed or interrupted and such curtailment or interruption is not considered in determining whether the Permissible Limit has been exceeded. The Authority noted in particular the terms of paragraph (ii) of sub-clause 14.1(b) that provides for the curtailment or interruption of the Tf Service where that is necessary for DBP to comply with obligations (for the receipt or delivery of gas) "under any prior contract or any contract which is subject to curtailment or interruption only after the curtailment or interruption of the Tf Service".

44. In regard to these provisions for curtailment and interruption, the Authority noted that the standard contract on the basis of which existing Users re-negotiated transmission contracts with DBP in late 2004 ("**Standard Shipper Contract**"[5]) provides for gas receipts and deliveries for Users with a Service Contract based on the Standard Shipper Contract to have priority over Users with a Tf Service in the event that a curtailment or interruption is necessary. Sub-clause 17.9(a) of the Standard Shipper Contract provides:

> Any Curtailment of Shipper's Total Contracted Capacity or capacity under a Spot Transaction, is to be conducted in accordance with the Curtailment Plan. In applying the Curtailment Plan in a Point Specific Curtailment or System Curtailment, a Type of Capacity Service will only be Curtailed once all Types of Capacity Services listed below it in that column in the Curtailment Plan have been reduced to zero.

45. The Curtailment Plan is set out in Schedule 8 to the Standard Shipper Contract. The Curtailment Plan does not refer specifically to the Tf Service. However, the Tf Service would not fall within the first two priority types of capacity in the Plan. The third priority in the Curtailment Plan is Alcoa's Exempt Delivery Entitlement (excluding Alcoa's Priority Quantity) and the T1 Service (including Aggregated T1 Service) apportioned in accordance with the provisions of Part B of Schedule 8. The effect of Part B of Schedule 8 is that up to the next 253.5TJ/d of available capacity after the first two priority types of capacity is apportioned half to Alcoa and half to the T1 Service. After that, a proportion of the available capacity is to be apportioned to Alcoa and the balance to the T1 Service. Sixth in the order of priority is "Other Reserved Service". The Tf Service would appear to fall within the definition of "Other Reserved Service" which is defined in clause 1 to mean a Capacity Service offered under a contract which, in the Operator's opinion acting reasonably, has a capacity reservation charge or an allocation reservation deposit or any material equivalent to such charge or deposit which is payable up front or from time to time in respect to the reservation of capacity under that contract for at least a reasonable time into the future (but at all times excluding a T1 Service, a Firm Service and Capacity under a Spot Transaction).

46. For the reasons of:

- the wide range of circumstances set out in sub-clause 14.1(b) of the Access Contract Terms and Conditions (and in particular as implied by paragraph 14(b)(i)) in which the Tf Service may be curtailed or interrupted and the curtailment or interruption is not considered in determining whether the Permissible Limit has been exceeded; and

[5] DBNGP (WA) Transmission Pty Ltd, Standard Shipper Contract – Full Haul T1: Dampier to Bunbury Natural Gas Pipeline (Provided to the Economic Regulation Authority on 4 April 2005). A copy of the Standard Shipper Contract is available on the Authority's web page.

- the subordinate priority of the Tf Service, relative to other Services, for gas receipts and deliveries in the event that a curtailment or interruption is necessary,

the Authority indicated in its Draft Decision that it concurred with the submissions made by some Users of the DBNGP that the Tf Service is substantially less reliable than the Permissible Limit would suggest (or indeed than the Permissible Limit in the terms and conditions for the Firm Service under the Current Access Arrangement) and that the Tf Service is more in the nature of an "interruptible service" rather than a "firm service" as these terms are generally used in the market for gas transmission services.

47. The Authority also took the view in its Draft Decision that the principal Service that would be sought by Users of a Gas Transmission Pipeline would be in the nature of a firm service, i.e. a Service provided with a high and guaranteed level of reliability. For the DBNGP, this has been evident by the Service historically provided to Users under contracts entered into under the *Gas Transmission Regulations 1994* and *Dampier to Bunbury Pipeline Regulations 1998*, the nature of the Reference Service proposed in 1999 by Epic Energy and contained in the Current Access Arrangement, and the nature of the Service contracted for by Users under terms as set out in, or substantially based on, the Standard Shipper Contract ("**T1 Service**").

48. For reason of the Tf Service being in the nature of an interruptible service, the Authority indicated in its Draft Decision that it did not consider that it is in the nature of a Service likely to be sought by a significant part of the market. There were no submissions made to the Authority either indicating a demand or potential demand for a service in the nature of the Tf Service or an interruptible Service.

49. The Authority also noted in its Draft Decision that, by virtue of there being no other Reference or Non-Reference Service offered under the Proposed Access Arrangement that is in the nature of a firm Service, there is no opportunity for a Prospective User of the DBNGP to obtain a Service typically sought from a gas transmission pipeline by contracting for the Tf Service in combination with other Services described in the Services Policy of the Proposed Access Arrangement.

50. DBP submitted to the Authority that, in determining whether the Tf Service is a Service likely to be sought by a significant part of the market, consideration should be given to the capacity of the DBNGP to provide a Service that is more in the nature of a firm service (such as the Firm Service under the Current Access Arrangement or a T1 Service). DBP submitted that:[6]

> In the context of the capacity on the DBNGP that is not presently contracted or likely to remain uncontracted during the access arrangement period, [DBP] … submits that:
>
> (a) there is not likely to exist any spare capacity on the DBNGP (as it is currently configured) which could be contracted for on the basis of either a Firm Service or T1 Service; and
>
> (b) in relation to the expansion of the capacity of the DBNGP that is proposed to take place during the proposed Access Arrangement Period, there will not exist any spare

[6] DBNGP (WA) Transmission Pty Ltd, 14 March 2005, Dampier to Bunbury Natural Gas Pipeline Proposed Revised Access Arrangement Submission #3 Services Policy ("**DBP Submission #3**"), paragraph 2.14. DNBNGPT has also indicated to the Authority that "the only basis on which a T1 Service could be contracted for on the DBNGP (as it is currently configured) is if an existing shipper with contracted T1 capacity ends its existing contract" (DBP Submission #19).

> capacity which could be contracted for on the basis of either a Firm Service or T1 Service; all of this capacity will be pre-contracted under pre-existing contracts.

51. In the Draft Decision, the Authority indicated that it does not accept that a lack of Spare Capacity on a pipeline to provide a Service of a particular nature necessarily means that such a Service cannot be likely to be sought by a significant part of the market. The Access Arrangement does not only apply to existing uncontracted capacity. If an existing contract is terminated and additional Capacity thereby becomes Spare Capacity, Prospective Users may need to have resort to the Access Arrangement in negotiating an access contract for this Capacity. The Access Arrangement also applies to Developable Capacity.

52. While noting the submissions from DBP, given the absence of evidence that the proposed Tf Service is likely to be sought by a significant part of the market, the Authority expressed the view in its Draft Decision that the Tf Service does not meet the requirements of the Code for a Reference Service.

53. Following from this view, the Authority considered the nature of a Service that is likely to be sought by a significant part of the market and that should be included in the Access Arrangement as a Reference Service.

54. In this regard, the Authority was mindful that Users of the DBNGP have recently negotiated with DBP for provision of the T1 Service.

55. The nature of the T1 Service is evident from clause 3.2 and other clauses of the Standard Shipper Contract as a Service with the following characteristics.

- The Service is a full haul service under which DBP takes receipt of gas into the DBNGP at a Receipt Point and delivers that gas to one or more Delivery Points at a location or locations downstream of Compressor Station 9.[7]
- The obligation of DBP to take receipt of gas into the DBP on a Day is limited to the User's contracted capacity plus any system use gas that the User is required to deliver to the pipeline.[8]
- The obligation of DBP to deliver gas at a Delivery Point is limited to the User's contracted capacity aggregated across all Delivery Points.[9]
- The Service cannot involve part haul or back haul of gas.[10]
- The extent to which the Service can be interrupted or curtailed without liability of DBP is restricted by a limit on the total time that the Service is interrupted or curtailed within each year.[11]

56. In the Draft Decision, the Authority indicated its understanding that the majority of Users have entered into contracts with DBP under terms substantially the same as those set out in the Standard Shipper Contract. The Authority expressed the view

[7] Standard Shipper Contract, sub-clause 3.2(a).

[8] Standard Shipper Contract, clause 5.1.

[9] Standard Shipper Contract, clause 5.2.

[10] Standard Shipper Contract, sub-clause 3.2(c)

[11] Standard Shipper Contract, clause 17.2.

that a mutual willingness of both Users and DBP to enter into contracts including a Service of the nature of the T1 Service under terms as set out in, or substantially based on, the Standard Shipper Contract indicates that the Service of the nature provided under the Standard Shipper Contract is likely to be sought by a significant part of the market and that DBP is willing and able to provide such a Service.

57. The Authority consequently expressed the view in its Draft Decision that a Service in the nature of the Service that would be obtained under the Standard Shipper Contract is likely to be sought by a significant part of the market and would meet the requirements of the Code for a Reference Service.

58. DBP submitted that mechanisms exist under the Standard Shipper Contract and under another agreement for Users and Prospective Users to obtain the T1 Service by means of Developable Capacity and, hence, provision for obtaining such a Service as a Reference Service under the Access Arrangement is unnecessary:

> … all existing shippers are entitled to access to developable capacity subject to certain conditions existing. The fact that this right is afforded to all existing shippers suggests that shippers will rely on their contractual rights to access existing capacity, rather than rely on the outworkings of a regulatory approval process.
>
> Even if it is suggested that existing shippers will want to access additional T1 Capacity other than in accordance with the mechanism under the pre-existing contracts (and as at the date of this submission, there are no access requests from existing shippers to this effect), Operator is obliged … to make available T1 Service to shippers which request such a service.
>
> Accordingly, Operator submits that there is no benefit to users and prospective users to include a T1 Service in the access arrangement.[12]

59. The Authority did not accept that the availability of alternative mechanisms to obtain the T1 Service is a reason for the Access Arrangement not to include a Service of the same nature as the T1 Service as a Reference Service. The Code requires the Service Provider to include in the Access Arrangement a Reference Service that is likely to be sought by a significant part of the market as a Reference Service, and the fact that such a Service may be obtained by a Prospective User by some other mechanism does not lessen this requirement.

60. DBP also submitted that requiring a T1 Service to be included in the Access Arrangement as a Reference Service would be contrary to the legitimate business interests of DBP for reasons that the Reference Tariff determined for a T1 Service would be likely to be less than the tariff under contracts for this service which would create contractual difficulties with Users that hold contracts for gas transmission that include terms as set out in, or substantially based on, the Standard Shipper Contract.[13]

61. In the Draft Decision the Authority did not accept that any contractual difficulties that may be experienced by DBP, as a result of inclusion in the Access Arrangement of a Reference Service that is in the nature of the T1 Service, comprised a basis for not including such a Service in the Access Arrangement.

62. Under section 2.47 of the Code, the Authority must not approve revisions to an Access Arrangement (or draft and approve its own revisions to an Access

[12] DBP Submission #3

[13] DBP Submission #3, paragraphs 4.3, 4.4.

Arrangement) if a provision of the Access Arrangement as revised would, if applied, deprive any person of a contractual right in existence prior to the date the revisions to the Access Arrangement were submitted (or were required to be submitted), other than an Exclusivity Right which arose on or after 30 March 1995. Despite the submission from DBP indicating that requiring the Access Arrangement to include a T1 Service as a Reference Service would create contractual difficulties with Users, the Authority had no information before it that indicated that inclusion of a Reference Service in the Access Arrangement that is in the nature of the T1 Service would deprive DBP or any other person of a contractual right.

63. The Authority therefore took the view in its Draft Decision that the Access Arrangement should include a Reference Service in the nature of the T1 Service under the Standard Shipper Contract.

64. In including a Service in the nature of the T1 Service in the Access Arrangement, the Authority considered that it is necessary that the description of the Service include the minimum term of a contract for the Service.

65. The Authority noted that, for the Tf Service, DBP proposed:

- a minimum contract term of five years where a Prospective User's request for the Tf Service may be provided by use of Spare Capacity; and
- a minimum contract term of 20 years where a Prospective User's request for the Tf Service may be provided by use of Developable Capacity.

66. DBP did not provide reasons for proposing these minimum terms.

67. The proposed minimum contract term of five years for a Service provided by means of Spare Capacity is substantially in excess of minimum contract terms of one or two years established under Access Arrangements for other transmission pipelines and distribution systems in Australia, generally at the initiative of the Service Providers.[14]

68. The Authority expressed the view in its Draft Decision that, with the introduction of full retail contestability in gas markets in Western Australia and with ongoing deregulation of electricity markets, there are likely to be new customers coming into the market for gas transmission services. To the extent that long minimum terms for gas transmission contracts may impose a barrier to entry to gas and electricity markets, the Authority considered that a minimum contract term of two years would be in the public interest, including the public interest in having competition in markets.

69. The Authority therefore took the view in its Draft Decision that a Reference Service in the nature of the T1 Service should have a minimum contract term of two years when made available through utilisation of Spare Capacity.

70. In regard to provision of a Reference Service through utilisation of Developable Capacity, the Authority determined that, where Capacity expansion is necessary to provide a Reference Service in the nature of a T1 Service, there is no reason for the minimum contract term for that Service to be different to that of 15 years under the Standard Shipper Contract.

[14] Provision is made for minimum contract terms of two years or less under Access Arrangements for the Amadeus Basin to Darwin Pipeline, Moomba to Adelaide Pipeline, Moomba to Sydney Pipeline and Central West Pipeline.

71. Taking into account the matters described above, the Authority indicated a requirement in its Draft Decision for the following amendment.

> The Services Policy of the Proposed Access Arrangement should be amended to remove the Tf Service and to include a Reference Service that is of the nature of the "T1 Service" to which the Standard Shipper Contract relates. The minimum contract term for this Service should be 2 years when it is made available to a Prospective User through the utilisation of Spare Capacity and 15 years when it is made available to a Prospective User through the utilisation of Developable Capacity. (Draft Decision Amendment 1)

Submissions on the Draft Decision

72. The required amendment to remove the Tf Service from the Proposed Access Arrangement and include a Reference Service in the nature of the T1 Service amendment received support in submissions from Apache Energy, NWSG and Western Power.

73. DBP has made submissions opposing the inclusion in the Access Arrangement of a Reference Service in the nature of the T1 Service, for reasons that:

- the T1 Service does not satisfy the requirements of the Code for a Reference Service as it is not likely to be sought by a significant part of the market; and
- this would expose DBP to significant adverse consequences under the series of contracts that were renegotiated with Users in October 2004.

74. DBP has also made a submission opposing the requirement for a minimum term of two years for an access contract for the Reference Service where that Service is provided by use of Spare Capacity. DBP's reasons for opposing the minimum term of two years are that:

> Firstly the Regulator's Draft Decision places too much weight on the public interest in encouraging full retail contestability in Western Australian gas markets and insufficient weight on the legitimate business interests of the Service Provider. As has been previously outlined in submissions prior to the draft decision, the full haul capacity of the pipeline is fully contracted on the basis of SSC terms and conditions containing a minimum term of 15 years. These contracts underpin the financial viability of the pipeline and its proposed expansion. The only foreseeable basis upon which spare full haul capacity may become available and be accessed under the Access Arrangement would be if one of those contracts were to be terminated as a result of shipper default or insolvency. It would in those circumstances be unreasonable to require the Service Provider to accept replacement contracts having a minimum term of only two years. The Operator should not be prejudiced from achieving an outcome that was based on a reasonable commercial assessment when it purchased the pipeline. The minimum term amendment would, in circumstances where an existing contract is terminated, expose Operator to this risk.
>
> Secondly, the Draft Decision does not take sufficient account of the minimum term applicable under the SSC. The Regulator has adopted the terms and conditions of the SSC, except in relation to gas quality, tariff and duration of the contract. In doing so, the Regulator comments that "...there has to be [sic] no general claim that the terms and conditions set out in the Standard Shipper Contract are unreasonable, except in relation to gas quality. The Authority therefore considers that, with the exception of terms and conditions relating to gas quality (addressed further below), the terms and conditions for the T1 Service as set out in the Standard Shipper Contract appear, prima facie, to be reasonable within the meaning of section 3.6 of the Code." The minimum term applicable under the SSC is 15 years and, on

that basis, it is reasonable that if the service is to be included in as a reference service, it should be for a minimum term of substantially longer minimum term than two years.[15]

Final Decision

75. The Authority in its Draft Decision addressed the prospect of demand for a T1 Service during the Access Arrangement Period.[16] The Authority acknowledges that there is not likely to be Spare Capacity for the T1 Service (as a full haul Service) during the Access Arrangement Period.

76. The Authority does not, however, accept that a lack of Spare Capacity on a pipeline to provide a Service of a particular nature necessarily entails that the Service is not likely to be sought by a significant part of the market. The Access Arrangement does not only apply to uncontracted capacity. The Code regulates the prices that can be charged for pipeline services by determining the cost of providing the service to the whole market and then establishing the prices that may be charged by reference to that cost. It would be inconsistent with this process if a Reference Service is chosen which represents only a small part of the total Services provided by means of the pipeline. In this context, it is also important that section 3.3(a) refers to the Service being "sought by a significant part of the market", not a significant part of those seeking access under the Access Arrangement. The Access Arrangement also applies to Developable Capacity.

77. In view of these considerations, the Authority does not accept DBP's contention that the T1 Service does not satisfy the requirements of the Code for a Reference Service as it is not likely to be sought by a significant part of the market.

78. The potential exposure of DBP to contractual difficulties under the series of contracts that were renegotiated with Users in October 2004 was also a matter addressed by the Authority in its Draft Decision.[17] In view of the submission from DBP subsequent to the Draft Decision, the Authority has given further consideration to this matter. In doing so, the Authority has had particular regard to:

- sections 2.46(a), 2.24(a), 2.24(b) 2.24(e) and 2.24(f) of the Code that require the Authority to take into account the legitimate business interests of the Service Provider; and firm and binding contractual obligations of the Service Provider or other persons (or both) already using the Covered Pipeline; the public interest, including the public interest in having competition in markets (whether or not in Australia); the interests of Users and Prospective Users; and

- section 2.47 of the Code that prevents the Authority from "approv[ing] revisions to an Access Arrangement (or drafting and approving its own revisions to an Access Arrangement) if a provision of the Access Arrangement as revised would, if applied, deprive any person of a contractual right in existence prior to the date the revisions to the Access Arrangement were submitted (or were required to be submitted), other than an Exclusivity Right which arose on or after 30 March 1995".

[15] DBP Public Submission #27, pages 3, 4.

[16] Draft Decision, paragraph 48.

[17] Draft Decision, paragraphs 57, 58.

79. In a confidential submission to the Authority, DBP has argued that DBP's compliance with a requirement to include a T1 Service in the revised Access Arrangement and terms and conditions of service the same (or substantially similar to) as the terms and conditions in the Standard Shipper Contract would jeopardise pre-existing contractual rights and would fail to take into account its legitimate business interests. These arguments are set out and addressed in detail in Confidential Annexure A to this Final Decision.

80. In the Authority's view, a contractual provision cannot constrain revisions to an Access Arrangement in circumstances where DBP is obliged by legislation (the Code) to submit revisions that include the elements described in section 3.1 to 3.20 of the Code. To allow it to do so would mean that the contractual provision would fetter DBP's performance of its statutory obligations that, in the Authority's view, would be contrary to public policy.

81. To the extent that such a contractual provision is not void as being contrary to public policy, the Authority notes that DBP has not sought a T1 Service as a Reference Service. In fact, DBP's submissions clearly indicate the contrary.

82. The Authority acknowledges that the Reference Tariff for the T1 Reference Service may have adverse financial repercussions for DBP under its existing shipper contracts. However, the process of determining a Reference Tariff under the Code establishes a Reference Tariff that allows for DBP to recover the cost of providing services, including a Rate of Return on investment, and to this extent protects the commercial interests of DBP.

83. The possibility of commercial detriment to the Service Provider from existing contractual arrangements must be weighed against the interests of Users and Prospective Users in having a Reference Service in the nature of the T1 Service and that is demonstrably a Service that is required by the market. The Authority has formed the view that the interests of Users and Prospective Users outweigh any possible detriment to DBP and, accordingly, is of the view that the possible detriment to DBP is not a sufficient basis to exclude making such a Service a Reference Service.

84. The Authority does not accept DBP's contention that the minimum term of two years for the Reference Service is unreasonable because it is contrary to DBP's stated requirement for 15 year contracts to underpin the financial viability of the DBNGP and its proposed expansion. While the minimum contract terms under the contracts entered into with existing Users of the pipeline are substantially longer than two years, the Authority does not accept that this provides reason for the minimum terms of contracts to be of similar length in the event that the T1 Service is included in the Access Arrangement as a Reference Service.

85. While DBP claims that contract terms shorter than two years create a commercial risk, the Authority notes that the process for determination of Reference Tariffs under the Code serves to reduce risks that DBP may face of declining demand for pipeline services. The Code requires a Reference Tariff to be established at a level that will take into account the effect on the viability of the Service Provider. Moreover, the Reference Tariff is only set for the Access Arrangement Period. If circumstances change before the next Access Arrangement Period then the tariff will be re-set accordingly. Further, if there is a material change in circumstances during the Access Arrangement Period then DBP may apply for a variation of the Access Arrangement pursuant to section 2.28 of the Code.

86. The Authority also notes that the full-haul Capacity of the DBNGP is currently fully contracted and predicted to remain so over the proposed Access Arrangement Period. Accordingly, it is only where a contract is terminated, or in other limited circumstances (as set out and addressed in Confidential Annexure B), that a party will be able to access Capacity with a contract that has a minimum term of two years.

87. In entering into the contracts with existing Users, DBP would have been aware of the potential risk of these contracts being prematurely terminated, and the Authority does not consider that the Access Arrangement should properly shelter DBP from this risk.

88. In balancing this potential detriment to DBP with the public interest and benefit to Users and Prospective Users in having a Reference Service in the nature of the T1 Service, the Authority has formed the view that the public benefits in fostering competition in upstream and downstream gas markets outweigh any possible detriment to DBP.

89. Concerning section 2.47 of the Code, the Authority has examined the terms of confidential contractual provisions provided by DBP and the terms of the Standard Shipper Contract and has formed the view that the proposed revisions would not, if applied, deprive any person of a contractual right in existence prior to the date the revisions to the Access Arrangement were submitted (or were required to be submitted). Further, to the extent that existing contracts have price review provisions which may be triggered by the revisions, it is not a deprivation of a contractual right when that contingency was, in reality, already catered for by the terms of the existing contract.

90. Taking into account the submissions on the Draft Decision, all of the above matters and the fact that minimum contract terms of one or two years have been established under Access Arrangements for a number of other transmission pipelines and distribution systems in Australia, the Authority maintains the view that the Access Arrangement should include a Reference Service that is in the nature of the T1 Service and that the minimum term of contract for this Service should be two years where the Service is provided by use of Spare Capacity.

Final Decision Amendment 1

The Services Policy of the Proposed Access Arrangement should be amended to remove the Tf Service and to include a Reference Service that is of the nature of the "T1 Service" on the terms and conditions as set out in Appendix 1 of this Final Decision. The minimum contract term for this Service should be two years when it is made available to a Prospective User through the utilisation of Spare Capacity and 15 years when it is made available to a Prospective User through the utilisation of Developable Capacity.

Are there other Services that should be described in the Services Policy?

Draft Decision

91. As noted above (paragraph 32), the Services Policy of the Proposed Access Arrangement includes a range of Services in addition to the Tf Service. These Services are included in the Services Policy as Non-Reference Services, that is, there is no Reference Tariff specified for any of these Services.

92. The Non-Reference Services listed in the Services Policy are the same as those included in the Services Policy of the Current Access Arrangement, with the addition of a Part Haul Service and a Back Haul Service. As with the Current Access Arrangement, brief descriptions of some of the Non-Reference Services are provided in the "Definitions" section of the Access Arrangement document (section 13 of the Proposed Access Arrangement).

93. Western Power submitted that one of the proposed Non-Reference Services, the Spot Capacity Service (which appears to replace the Secondary Market Service in the Current Access Arrangement), should either be made a Reference Service or removed from the Services Policy to limit DBP's discretion (vis a vis the Arbitrator in the event of a dispute regarding access to the Service) in setting the terms and conditions for the Spot Capacity Service.

94. The Authority noted in its Draft Decision that, while the Spot Capacity Service is not described in the Access Arrangement, it may be presumed that it involves determination of a price for capacity on a "spot" basis, depending upon demand and supply for Capacity at a particular time. It is not necessary that the Spot Capacity Service should have a price determined by market conditions at any particular time, as opposed to having a posted price established *ex ante*. However, the Authority considered that there is substantial merit in having a market price for this Service for reason of the signals that such a pricing mechanism would provide to the Service Provider as to the value of additional pipeline Capacity and the potential returns from investment in expansion of Capacity. In such a case, it is not possible to determine a Reference Tariff for that Service and, hence, the Spot Capacity Service cannot be a Reference Service.

95. It is indicated under the definitions of the Spot Capacity Service, the Spot Market Rules and the Spot Transaction Terms and Conditions that the terms and conditions for the Spot Capacity Service are able to be varied by DBP from time to time. This would appear to exclude the possibility of negotiation with Users and Prospective Users in the determination of terms and conditions for this Non-Reference Service, and may limit the power of the Arbitrator to determine terms and conditions in any access dispute in relation to this Service. Accordingly, the Authority indicated in its Draft Decision a requirement for the definition of Spot Transaction Terms and Conditions in the Proposed Access Arrangement to be amended to explicitly provide for negotiation of the terms and conditions with Users and Prospective Users and resort to arbitration in the event of a dispute over terms and conditions.

> The Proposed Access Arrangement should be amended so that the definition of Spot Transaction Terms and Conditions explicitly provides for these terms and conditions to be negotiated with Users and Prospective Users, with resort to arbitration in the event of a dispute over terms and conditions. (Draft Decision Amendment 2)

96. No other submissions on the Proposed Access Arrangement indicated that any of the Services described as Non-Reference Services should not be included in the Access Arrangement, nor was there any submission that other Services should be included in the Services Policy. A number of parties submitted that two of the Services included in the Services Policy (the Part Haul Service and Back Haul Service) should be Reference Services, and the Authority addressed this matter in its Draft Decision separately (see below). A number of parties also expressed concern that there has been removal of provision under the Current Access Arrangement for some Non-Reference Services to be Rebatable Services within the meaning of sections 10.8 and 8.40 of the Code. The Authority addresses this matter in relation to the

Reference Tariff Policy and the determination of Reference Tariffs (refer to paragraph 394 and following, below).

97. Given that the Non-Reference Services included in the Services Policy include the Non-Reference Services of the Current Access Arrangement, and given the content of relevant submissions, the Authority took the view in its Draft Decision that there is no reason to require any additional Services to be included in the Services Policy.

98. In its submission on the Proposed Access Arrangement, Western Power raised a number of concerns with the Non-Reference Services included in the Proposed Access Arrangement and related provisions of the Services Policy.

99. Firstly, Western Power expressed concern over the provision of the Services Policy that indicates that the Non-Reference Services will be made available "subject to operational availability". Western Power submitted that this qualification on the availability of Non-Reference Services is undefined and ambiguous, and also inconsistent with the qualification on the availability of the proposed Tf Service, which is indicated to be available "subject to availability of Capacity". In its Draft Decision, the Authority accepted Western Power's submission that the qualification on availability of Non-Reference Services is inconsistent with an indication that a Service may be provided subject to availability of Capacity. The Authority noted that some of the Non-Reference Services are not in the nature of transmission Services, and, hence, a reference to availability of Capacity is not relevant. However, the Authority considered that the term "operational availability" should be differentiated from availability of Capacity and indicated in its Draft Decision a requirement for the following amendment.

> The Services Policy of the Proposed Access Arrangement should be amended to indicate that Non-Reference Services that are in the nature of gas transmission Services will be made available subject to availability of Capacity, and other Non-Reference Services will be made available subject to operational availability. (Draft Decision Amendment 3)

100. Secondly, Western Power submitted that the Seasonal Service as a Non-Reference Service by DBP should be different in nature.

101. Under the Proposed Access Arrangement, the Seasonal Service is defined as:

> Seasonal Service means Capacity made available by Operator in relation to a particular Month out of incremental capacity (being Capacity over and above Tf Service Capacity) available due to seasonal factors.

102. Western Power submitted that the Seasonal Service should be a Service whereby a User is able to contract for different MDQ in different months of the year according to seasonal variations in demand of the User for gas transmission and regardless of seasonal differences in the Capacity of the pipeline. Western Power further submitted that the absence of such a Service would potentially result in Western Power being forced to burn more expensive fuels or resort to load shedding, and cause the DBNGP owner to inefficiently invest in expanding pipeline Capacity so that each User with seasonal variations in demand could reserve sufficient Capacity over the entire year to meet its peak seasonal demands.

103. The Authority indicated in its Draft Decision that it recognised the distinction between the two types of Seasonal Services and that there is, or is likely to be, a demand for both types. However, the Authority did not consider that DBP should be required to provide the type of Seasonal Service requested by Western Power for reasons that requiring the provision of such a Service would not be reasonable as the Service

could adversely affect the utilisation of Capacity and the legitimate business interests of the pipeline owner.

104. The Authority also noted in its Draft Decision that there are other options available to Users with peak demands for pipeline Capacity in summer months, such as Western Power, to secure such Capacity only for the period required:

- purchase of additional Capacity and trading with other Users, including on a spot basis;
- purchase of Capacity for the entire year and sale of Capacity in months that it is not required; and
- negotiation with the Service Provider for provision of Capacity only in the months required, as a Service outside of the scope of Services provided for in the Services Policy.

105. In the event that Capacity sought by a User such as Western Power is not available through these alternative mechanisms, it is unlikely that requiring DBP to provide a Seasonal Service of the type sought by Western Power would be consistent with the efficient utilisation of pipeline Capacity as there would not appear to be a User with a complementary demand at other times of the year. In such a case, efficient allocation of costs in providing a Seasonal Service of the type sought by Western Power would require the User to pay for Capacity for the entire year.

106. The Authority expressed the view in its Draft Decision that requiring the provision of a Seasonal Service of the type requested by Western Power would neither be practical nor reasonable. Moreover, given available options for dealing with seasonal variations in demand for gas transmission, the Authority did not accept that the absence of a Seasonal Service of the type requested by Western Power would necessarily have the adverse outcomes set out by Western Power in its submission. The Authority maintains the view that there is likely to be a demand for a Seasonal Service of the nature requested by Western Power, and this demand may be significant within the meaning of section 3.2(a)(i) of the Code. However, taking into account the factors described in paragraphs 104 and 105 above, the Authority does not consider that it is necessary or desirable for this Service to be included in the Services Policy.

107. Thirdly, Western Power submitted that no descriptions are provided for several of the Non-Reference Services: the Peaking Service, metering information service, pressure and temperature control service, odorisation service and co-mingling service, and submits that the Access Arrangement should include descriptions for these Services.

108. The Authority noted in its Draft Decision that the Non-Reference Services for which no descriptions are provided have "titles" that are descriptive of the Service. However, the Authority accepted that section 3.2(a) of the Code requires a description of Services and a title of a Service would not, in itself, meet this requirement. The Authority therefore considered that, in the absence of descriptions of all Non-Reference Services, the Services Policy does not meet the requirements of section 3.2(a) and indicated a requirement for the following amendment.

The Services Policy of the Proposed Access Arrangement should be amended to include descriptions of all Non-Reference Services. (Draft Decision Amendment 4)

109. Fourthly, Western Power submitted that DBP should provide further information as to the reasons why the list of Non-Reference Services includes those Services that Users have obtained under contracts entered into *prior* to the commencement of the Access Arrangement, but the list of Non-Reference Services does not include Services (other than the proposed Reference Service) that Users have obtained under contracts entered into *after* the commencement of the Access Arrangement.

110. It was not clear to the Authority why DBP has included in the list of Non-Reference Services those Services provided to Users under contracts entered into prior to the commencement of the Access Arrangement. The effect of this is that DBP is committing to continue to provide those Services into the future if sought by Prospective Users, regardless of whether a Prospective User has previously received that Service. The Authority further considered that, if this is the intent of DBP, then it is not clear why there is not the same willingness to provide Services that Users have obtained under contracts entered into *after* the commencement of the Access Arrangement. However, the Authority saw no reason to require the latter to be included in the Access Arrangement as Non-Reference Services, nor reason to require DBP to explain why the distinction has been made.

111. Finally, Western Power submitted that the provision in the Services Policy of the Proposed Access Arrangement which indicates that "[DBP] *is prepared to* negotiate to provide a Prospective Shipper with any other service that is not a Reference Service" should be replaced with the provision that "[DBP] *will* negotiate to provide a Prospective Shipper with any other service that is not a Reference Service". The Authority did not accept that the revision proposed by Western Power is necessary to comply with the requirements of the Code.

Submissions on the Draft Decision and Final Decision

112. Amendment 2 of the Draft Decision required that the Proposed Access Arrangement be amended so that the definition of Spot Transaction Terms and Conditions explicitly provides for these terms and conditions to be negotiated with Users and Prospective Users, with resort to arbitration in the event of a dispute over terms and conditions.

113. DBP has made a submission that, while not opposing the required amendment, indicates that the requirement should be addressed in the context of the need to have a set of common terms and conditions between the Service Provider and all potential Users of the Spot Market. DBP has proposed that this be addressed by including certain key principles of the Spot Market Service in the description of the Service and allowing for the rules for operation of the market to be established unilaterally by DBP, but otherwise providing for terms and conditions for the provision of this Service to be established by negotiation with Users and Prospective Users. The Authority considers that DBP's proposal addresses the Authority's concerns as set out in its Draft Decision and has consequently revised the requirement for amendment of the Proposed Access Arrangement to reflect this proposal.

Final Decision Amendment 2 The Proposed Access Arrangement should be amended so that the definition of the term "Spot Transaction Terms and Conditions" explicitly provides for these terms and conditions, other than the key principles and rules for operation of the market, to be negotiated with Users and Prospective Users, with resort to arbitration in the event of a dispute over terms and conditions.

114. Amendment 3 of the Draft Decision required that the Services Policy of the Proposed Access Arrangement be amended to indicate that Non-Reference Services that are in the nature of gas transmission Services will be made available subject to availability of Capacity, and other Non-Reference Services will be made available subject to operational availability.

115. DBP has made a submission opposing this required amendment for reason that an obligation to provide Services subject to availability of Capacity does not adequately protect the Service Provider in circumstances where it is unable to provide a Service:

> The issue of the distinction between Capacity and operational availability is a real one. Capacity is a theoretical term. It is determined by reference to fixing values for key assumptions such as gas quality, compressor unit availability and reliability, air temperature, MAOP of the pipeline etc. More importantly, if the Standard Shipper Contracts are to be used as the basis for establishing the terms and conditions for the reference service, then the Capacity is only going to be able to be changed in accordance with the provisions of the Standard Shipper Contract – this will essentially mean only after the pipeline is reconfigured. However, if the actual values of the key assumptions change but not as a result of the reconfiguration of the pipeline, then the Capacity of the pipeline will not be able to be reset.
>
> Operational availability on the other hand, requires a practical assessment to be undertaken based on actual situations. For example, if there is a maintenance program that needs to be undertaken over a period but which was not assumed when determining the Capacity of the pipeline, Operator may be forced to make available a gas transmission service even though it is not operationally available.[18]

116. The Authority is not satisfied by DBP's submission that it is necessary to distinguish availability of Capacity from "operational availability" in indicating the ability to provide a Service that is in the nature of a gas transmission service. The Authority accepts that, while the day-to-day Capacity of the DBNGP to provide Services may vary for reasons relating to operation of the pipeline (including for reasons of maintenance activities), such variability in the ability to provide Services should be taken into account in the terms and conditions for provision of those Services (in particular in relation to interruptions and curtailment) rather than a constraint on Service provision. As such, the Authority maintains the view that the relevant constraint on provision of Services that are in the nature of gas transmission services should be the availability of Capacity. However, the Authority accepts that a broader definition of operational availability to provide other Non-Reference Services should be included in the Access Arrangement. In this regard, the Authority considers that a definition in the following terms would be appropriate.

> "Operational Availability means operationally available in Operator's opinion (acting as a reasonable and prudent pipeline operator) in the circumstances prevailing or anticipated at the relevant time, including, as appropriate and without limitation, those circumstances relating to:
>
> (a) the configuration and status of the DBNGP, including without limitation any physical constraints, scheduled or unscheduled maintenance, equipment unavailability or emergencies;
>
> (b) the individual and collective Contracted Capacities and load characteristics of all shippers;
>
> (c) the Capacity generally;

[18] DBP Submission #27

(d) Operator's relevant entitlements and obligations under any contract or Law; and

(e) the availability of equipment generally to enable the Operator to provide the service."

117. The Authority therefore requires the following amendment to the Proposed Access Arrangement.

> Final Decision Amendment 3
>
> The Services Policy of the Proposed Access Arrangement should be amended to indicate that Non-Reference Services that are in the nature of gas transmission Services will be made available subject to availability of Capacity, and other Non-Reference Services will be made available subject to operational availability, an appropriate definition of which should be included in the Access Arrangement.

118. Draft Decision Amendment 4 required that the Services Policy of the Proposed Access Arrangement be amended to include descriptions of all Non-Reference Services.

119. DBP has made a submission indicating that it is willing to respond to this requirement and the Authority correspondingly maintains the requirement in this Final Decision.

> Final Decision Amendment 4
>
> The Services Policy of the Proposed Access Arrangement should be amended to include descriptions of all Non-Reference Services.

Should any additional Services be included in the Access Arrangement as Reference Services?

Draft Decision

120. The Tf Service proposed as the sole Reference Service in the Proposed Access Arrangement does not make provision for the back haul or part haul of gas as a component of the Service. The Tf Service provides for the full haul of gas from existing Receipt Points near or upstream of Compressor Station 2, to Delivery Points south of Compressor Station 9. Part haul of gas in this context refers to the delivery of gas between a Receipt Point and downstream Delivery Points other than in accordance with the definition of full haul, and back haul of gas refers to gas delivery to a Delivery Point located upstream of the relevant Receipt Point under the contract for the delivery of gas.

121. A number of parties made submissions to the Authority that the Part Haul Service included in the Proposed Access Arrangement as a Non Reference Service should be a Reference Service.[19] One party also submitted that the Back Haul Service should be a Reference Service.[20]

[19] Apache Energy Limited, North West Shelf Gas Joint Venture, Tiwest, WMC, Western Power.

[20] Apache Energy Limited.

122. The reasons set out in submissions as to why a Part Haul Service should be included in the Access Arrangement as a Reference Service are as follows.

- A Part Haul Service is sought by a significant part of the market, with one party indicating that it will ship in excess of 110 TJ/day of gas as Part Haul by mid 2005.[21]

- There is precedent for a regulated Service or Reference Service for the Part Haul of gas in both the regulatory arrangements for the DBNGP prior to the commencement of the Code and in the Reference Service of the Current Access Arrangement.

- The absence of a Part Haul Service as a Reference Service will expose existing Users with Delivery Points in the Pilbara and Carnarvon regions to significant increases in the costs of gas transmission.

- A Part Haul Service is required as a Reference Service to facilitate pipeline on pipeline competition between the DBNGP and the Parmelia Pipeline.

123. DBP has forecast quantities of gas delivery by part haul of between about 43 and 55 TJ/day for the Access Arrangement Period.

124. The Authority indicated in its Draft Decision that it is satisfied that a Part Haul Service is sought by a significant part of the market. The Authority also noted that, while DBP has indicated that there are current and potential future constraints on the Capacity of the DBNGP south of Compressor Station 7 that will limit the extent to which a Reference Service in the nature of the Firm Service or T1 Service may actually be provided to a User in the forthcoming Access Arrangement Period,[22] there is by implication an expectation of DBP that some Spare Capacity exists to provide a Part Haul Service to Delivery Points upstream of Compressor Station 7.

125. The Authority also indicated in its Draft Decision that there is a substantial interest of Users and Prospective Users in having a Part Haul Service as a Reference Service, and a substantial public interest in the potential for a Part Haul Service as a Reference Service to facilitate the supply of competitively-priced gas to end users in the Pilbara and Mid-West regions of the State, and to end users of gas in the South West region via the Parmelia Pipeline.

126. The Authority therefore considered that the Access Arrangement should include a Part Haul Service as a Reference Service and indicated a requirement for the following amendment.

> The Services Policy and Reference Tariff Policy of the Proposed Access Arrangement should be amended as necessary to include a Part Haul Service as a Reference Service. The Part Haul Service should be in the nature of the T1 Service to which the Standard Shipper Contract relates and should have a minimum contract term of 2 years when it is made available to a Prospective User through the utilisation of Spare Capacity and 15 years when it is made available to a Prospective User through the utilisation of Developable Capacity. (Draft Decision Amendment 5)

[21] Apache Energy Limited.

[22] DBP Submission #3

127. One party made a submission that the Back Haul Service should also be a Reference Service.

128. The Authority noted in its Draft Decision that there are currently four Delivery Points on the DBNGP that have, or could potentially have, gas delivered by a Back Haul Service and that DBP has forecast quantities of gas delivery by Back Haul of up to 112 TJ/day for the Access Arrangement Period, which the Authority considers comprises a significant part of the market. The Authority also noted that there is potential for interconnection of the DBNGP with the Goldfields Gas Pipeline ("GGP") at Yarraloola (adjacent to Compressor Station 1 of the DBNGP) and that through an interconnection there is potential for gas to be delivered to the GGP via a Back Haul Service through the DBNGP. Finally, the Authority noted that increases in the provision of Back Haul Services would not depend upon expansions in the Capacity of the DBNGP, but rather would have some effect of increasing the Capacity of the DBNGP to provide forward haul Services over the interval of the pipeline over which the notional Back Haul of gas occurs.

129. Taking these matters into account, the Authority was satisfied that a Back Haul Service is sought by a significant part of the market and that this Service should be a Reference Service. The Authority therefore indicated a requirement for the following amendment.

> The Services Policy and Reference Tariff Policy of the Proposed Access Arrangement should be amended as necessary to include a Back Haul Service as a Reference Service. The Back Haul Service should be in the nature of the T1 Service to which the Standard Shipper Contract relates and should have a minimum contract term of 2 years when it is made available to a Prospective User through the utilisation of Spare Capacity and 15 years when it is made available to a Prospective User through the utilisation of Developable Capacity. (Draft Decision Amendment 6)

Submissions on the Draft Decision and Final Decision

130. A number of current Users of the DBNGP made submissions to the Authority supporting the requirements for amendment of the Proposed Access Arrangement to include a Part Haul Service and a Back Haul Service as Reference Services.

131. DBP made a submission to the Authority opposing the requirement for the Access Arrangement to include a Part Haul Service and a Back Haul Service as Reference Services, for reason that the Services do not satisfy the requirements of the Code for a Reference Service as they are not likely to be sought by a significant part of the market. DBP contends that as there is no forecast demand for Part Haul and Back Haul Services other than under existing contracts there is, as such, no forecast demand that would be satisfied by the Reference Services.

132. For similar reasons as set out by the Authority in relation to demand for the T1 Service (paragraph 75, above), the Authority does not accept DBP's contention that, in applying the criterion of section 3.2(a)(i) and 3.3(b) of the Code, demand for a Service should be considered only in the context of incremental demand during the Access Arrangement Period.

133. DBP has also submitted that the required minimum contract term of two years for the Part Haul and Back Haul Services is unreasonable for the same reasons as stated for the same requirement in respect of the T1 Service (paragraph 74, above). For the same reasons as stated in respect of the minimum term for the T1 Service

(paragraph 84, above), the Authority does not accept DBP's contention that the minimum term of two years is unreasonable.

134. Taking into account submissions on the Draft Decision, the Authority maintains the requirement for amendment of the Access Arrangement to include Part Haul and Back Haul Services as Reference Services. For the purposes of clarity the Authority makes the following distinction between Full Haul, Part Haul and Back Haul Services:

- the Full Haul Reference Service should provide for the transport of gas from any Receipt Point upstream of Main Line Valve 31 (MLV31) to any Delivery Point downstream of Compressor Station 9;
- the Part Haul Reference Service should provide for forward-haul transport of gas that does not meet the definition of the Full Haul Reference Service (including where gas is transported from a Receipt Point downstream of MLV31 to a Delivery Point downstream of Compressor Station 9); and
- the Back Haul Reference Service should provide for any transport of gas where the Delivery Point is upstream of the Receipt Point.

Final Decision Amendment 5

The Services Policy and Reference Tariff Policy of the Proposed Access Arrangement should be amended as necessary to include a Part Haul Service as a Reference Service. The Part Haul Service should be in the nature of the T1 Service on the terms and conditions set out in Appendix 1 of this Final Decision and should have a minimum contract term of two years when it is made available to a Prospective User through the utilisation of Spare Capacity and 15 years when it is made available to a Prospective User through the utilisation of Developable Capacity.

Final Decision Amendment 6

The Services Policy and Reference Tariff Policy of the Proposed Access Arrangement should be amended as necessary to include a Back Haul Service as a Reference Service. The Back Haul Service should be in the nature of the T1 Service on the terms and conditions set out in Appendix 1 of this Final Decision and should have a minimum contract term of two years when it is made available to a Prospective User through the utilisation of Spare Capacity and 15 years when it is made available to a Prospective User through the utilisation of Developable Capacity.

Reference Tariff and Reference Tariff Policy

Requirements of the Code

135. Section 3.3 of the Code requires that an Access Arrangement 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.

136. Section 3.4 of the Code cross references section 8 of the Code for the principles with which a Reference Tariff must comply:

> 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.

137. 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.

138. As referred to in sections 3.4 and 3.5 of the Code, section 8 of the Code sets out the principles with which Reference Tariffs and a Reference Tariff Policy included in an Access Arrangement must comply.

139. 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.

140. Section 8.1 of the Code also provides guidance as to the reconciliation of these objectives:

> 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.

141. In respect of the reconciliation of 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 s 8.1(a) to (f) can best be reconciled or which of them should prevail".[23]

142. In addition to the objectives set out in section 8.1 of the Code, 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;

[23] *Re Dr Ken Michael AM; Ex Parte Epic Energy (WA) Nominees Pty Ltd & Anor* (2002) 25 WAR 511, Declaratory Order 3.

(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.

Reference Tariff Policy

143. DBP provides a Reference Tariff Policy as section 7 of the Proposed Access Arrangement. The Reference Tariff Policy addresses the following matters:

- general principles for determination of the Reference Tariff (clause 7.1);
- the methodology for determination of Total Revenue (clause 7.2);
- calculation of the Capital Base (clause 7.3);
- forecast New Facilities Investment (clause 7.4);
- the Rate of Return and calculation of the return on the Capital Base (clauses 7.5 and 7.6);
- the Depreciation Schedule (clause 7.7);
- forecast Non Capital Costs (clause 7.8);
- allocation of costs between Services and between Users (clauses 7.9 and 7.10);
- variation of the Reference Tariff during the Access Arrangement Period (clause 7.11);
- Incentive Mechanisms (clause 7.12);
- Fixed Principles (clause 7.13); and
- rebate of charges (clause 7.14).

144. The general principles for determination of a Reference Tariff that are set out in clause 7.1 of the Proposed Access Arrangement are as follows:

7.1 General Principles

(a) Operator's Reference Tariff has been designed to recover from shippers using the Reference Service, that portion of the Total Revenue that reflects:

(i) those costs (including capital costs) which are directly attributable to the provision of the Reference Service; and

(ii) a share of those costs (including capital costs) which are attributable to provision of the Reference Service jointly with Services provided to other shippers with contractual rights existing prior to the commencement of this Access Arrangement Period and other Services which Operator considers are reasonably foreseeable to be offered during the Access Arrangement Period.

(b) The Reference Tariff has been determined on the basis of the gas specifications prescribed in Items 1 and 2 of Schedule 2 to the Access Contract Terms and Conditions that apply at the commencement of this Access Arrangement Period.

145. Sub-clause 7.1(a) largely repeats section 8.38 of the Code, relating to allocation of costs between Services. The Authority has no concerns with these provisions of the Proposed Access Arrangement.

146. Section 7.1(b) indicates that the Reference Tariff has been determined on the basis of the gas specifications prescribed in Items 1 and 2 of Schedule 2 of the Access Contract Terms and Conditions, which comprise the current Operating Specification of the pipeline. Under this Final Decision, the Authority is requiring a different (and broader) gas quality specification to apply to the Reference Services to be offered under the Access Arrangement (refer to paragraph 512 and following, below). In its Draft Decision, the Authority noted that the change in the gas quality specification may have implications for the costs that would be incurred by DBP over the Access Arrangement Period, and indicated an expectation that it would make revisions to cost forecasts to take this into account. DBP has not, however, made any submission subsequent to the Draft Decision to propose changes in cost forecasts that could arise from a change in the gas quality specification. Furthermore, for reasons set out in this Final Decision, the Authority is of the view that the broader gas quality specification required under this Final Decision is not likely to have a material effect on Capacity of the DBNGP during the period to 2010. Taking both of these factors into account, the Authority has assessed the proposed Reference Tariff on the premise that there are no material cost implications of the broader gas quality specification.

147. The remaining clauses of the Reference Tariff Policy relate to particular aspects of the calculation of Reference Tariffs, as well as to Fixed Principles and the rebate of charges. The matters are addressed separately below.

Capital Base

Requirements of the Code

148. Sections 8.4 and 8.5 of the Code set out methodologies that may be used to determine the Total Revenue for a pipeline:

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.

149. All of the methodologies described in section 8.4 of the Code for the determination of Total Revenue require, for their application, a valuation of the capital assets that form the Covered Pipeline at the commencement of the Access Arrangement Period ("**Capital Base**").

150. Section 8.9 of the Code describes the process by which the value of the Capital Base is established at the commencement of a second or subsequent Access Arrangement Period:

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 additions to the 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 to 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 Period; 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.

Proposed Roll Forward of the Capital Base

151. DBP's determination of the Capital Base applying at the beginning of the period 2005 to 2010 is set out in sections 4.1 to 4.3 of the Access Arrangement Information. Further information (in particular the roll-forward calculation of asset value by asset class) has been provided by DBP in a separate confidential submission to the Authority.[24]

152. DBP indicates in the Access Arrangement Information that the Capital Base has been rolled forward in the following manner:

(a) commencing with the initial Capital Base of $1,550.00 million on 31 December 1999;

(b) actual new facilities investment during the initial Access Arrangement Period has been added;

(c) depreciation as forecast in determining the Reference Tariff applying during initial Access Arrangement Period has been subtracted; and

(d) the Capital Base in each year of the initial Access Arrangement Period has been escalated at the actual rate of inflation.

153. The roll forward of the Capital Base is presented in the Access Arrangement Information in nominal value terms, indicated as follows with a conversion also to real values.

DBP Proposed Roll Forward of the Capital Base

Year ending 31 December	2000	2001	2002	2003	2004
Nominal $million ($ values at end of year)					
Capital Base at beginning of year (beginning of year dollar values)	1,550.00	1,626.19	1,638.75	1,646.77	1,642.60
New Facilities Investment	25.68	3.27	1.26	0.77	3.38
Depreciation	39.41	41.49	42.85	43.90	45.07
Inflation adjustment	89.93	50.78	49.62	38.96	42.56
Capital Base at end of year	1,626.19	1,638.75	1,646.77	1,642.60	1,643.47

[24] DBNGP (WA Transmission Pty Ltd), 27 January 2005, Confidential Submission #4.

DBP Proposed Roll Forward of the Capital Base

Year ending 31 December	2000	2001	2002	2003	2004
Real $million ($ values at 1 January 2005)					
Capital Base at beginning of year	1,829.77	1,814.45	1,773.09	1,729.41	1,685.16
New Facilities Investment	28.65	3.54	1.32	0.79	3.38
Depreciation	43.98	44.89	45.00	45.04	45.07
Capital Base at end of year	1,814.45	1,773.09	1,729.41	1,685.16	1,643.47

154. The Authority has examined each of the elements in the roll-forward calculation – New Facilities Investment, Depreciation and inflation adjustment – as set out below.

New Facilities Investment

155. Section 8.15 of the Code provides for New Facilities Investment to be added to the Capital Base of a pipeline, subject to that New Facilities Investment meeting a number of conditions in section 8.16.

> 8.15 The Capital Base for a Covered Pipeline may be increased from the commencement of a new Access Arrangement Period to recognise additional capital costs incurred in constructing, developing or acquiring New Facilities for the purpose of providing Services (New Facilities Investment).
>
> 8.16 (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 section 8.22.

156. For the Access Arrangement Period of 1 January 2000 to 31 December 2004, the following forecast of New Facilities Investment was taken into account in the Determination of the Reference Tariff.

Forecast New Facilities Investment for the Period 2000 to 2004

Year ending 31 December	2000	2001	2002	2003	2004	Total
Real $million ($ values at 31 December 1999)						
Pipeline	0.43	0.28	0.16	0.36	0.16	**1.38**
Compression	0.96	4.35	4.45	1.83	1.85	**13.44**
Metering	0.00	0.05	0.05	0.05	0.05	**0.20**
Other	5.06	5.04	5.72	4.72	0.52	**21.06**
Total	**6.45**	**9.72**	**10.38**	**6.96**	**2.58**	**36.08**
Real $million ($ values at 1 January 2005)						
Pipeline	0.51	0.33	0.19	0.42	0.19	**1.64**
Compression	1.13	5.13	5.25	2.16	2.18	**15.86**
Metering	0.00	0.06	0.06	0.06	0.06	**0.24**
Other	5.97	5.95	6.75	5.57	0.61	**24.85**
Total	**7.61**	**11.47**	**12.25**	**8.21**	**3.04**	**42.59**

157. In the Access Arrangement Information, DBP has indicated actual New Facilities Investment in the period 2000 to 2004 as follows. For the purposes of comparison with the forecast values taken into account in determination of the Reference Tariff, these values are indicated in nominal terms and in real terms in dollar values at 1 January 2005 (as set out by DBP in the Access Arrangement Information).

DBP Submitted Actual New Facilities Investment for the Period 2000 to 2004

Year ending 31 December	2000	2001	2002	2003	2004	Total
Nominal $million (dollar values at end of year)						
Pipeline	1.39	0.03	0.06	0.00	0.62	**2.10**
Compression	18.62	1.33	0.08	-0.11[25]	0.18	**20.10**
Metering	0.57	0.54	0.36	-0.03[25]	1.67	**3.11**
Other	5.10	1.37	0.75	0.92	0.90	**9.04**
Total	**25.68**	**3.27**	**1.26**	**0.77**	**3.38**	**34.35**
Real $million ($ values at 1 January 2005)						
Pipeline	1.55	0.03	0.07	0.00	0.62	**2.27**
Compression	20.78	1.44	0.09	-0.12	0.18	**22.37**
Metering	0.64	0.58	0.38	-0.03	1.67	**3.24**
Other	5.69	1.48	0.79	0.94	0.90	**9.80**
Total	**28.65**	**3.54**	**1.32**	**0.79**	**3.38**	**37.67**

158. DBP made a submission to the Authority in support of its claim that New Facilities Investment in the period 2000 to 2004 meets the requirements of section 8.16 of the Code.[26] DBP submits that all of the New Facilities Investment actually incurred during the period from 2000 to 2004 falls within the scope of either section 8.16(a)(ii)(B) or section 8.16(a)(ii)(C) of the Code.

[25] The Authority requested further information from DBP on the reasons for negative entries in records of actual New Facilities Investment and was informed that the negative entries are not errors but are values taken from accounting records and arising due to corrections to prior incorrect entries of capital costs. (DBP Submission #12)

[26] DBNGP (WA Transmission Pty Ltd), 27 January 2005, Submission #10.

159. Supporting information provided by DBP comprises information on:

- the approach of the prior owner of the DBNGP (Epic Energy) to approving capital projects and capital expenditures;
- the "alliance contracting" approach of the prior owner of the DBNGP in carrying out some of the capital works to which the New Facilities Investment relates;
- a "safety case" that provided the justification for many of the new facilities developed or acquired;
- the distressed financial state of the prior owner that imposed constraints and discipline on New Facilities Investment, including a requirement of the prior owner's debt providers that expenditures be examined by an independent accountant; and
- the nature and justification of specific items of New Facilities Investment by category of –
  - actual New Facilities Investment that was forecast for the original Access Arrangement, and
  - New Facilities Investment that was not forecast for the original Access Arrangement.

160. In its Draft Decision, the Authority took the view that, with the exception of New Facilities Investment indicated to be part of the Stage 3A expansion of the DBNGP (addressed further below), it was satisfied that the New Facilities Investment indicated by DBP for the period 2000 to 2004 meets the requirements of either section 8.16(a)(ii)(B) or section 8.16(a)(ii)(C) of the Code. In reaching this view, the Authority took into account:

- the appropriateness of the processes of the prior owner of the DBNGP in the approval and undertaking of capital works;
- the state of financial distress of the prior owner that would have imposed substantial discipline and constraints on capital expenditures during the period 2000 to 2004; and
- the nature of the capital works to which the New Facilities Investment relates, which were works generally for the purpose of maintaining the safety and operational capability of the pipeline rather than relating to expansion.

161. No submissions made subsequent to the Draft Decision addressed this element of the Draft Decision and the Authority maintains these views in this Final Decision.

162. In its Draft Decision, the Authority indicated that it did not consider that all costs relating to the Stage 3A expansion of the DBNGP should be rolled in to the Capital Base.

163. The expenditure items identified by DBP as relating to the Stage 3A expansion are as follows.

Actual New Facilities Investment for the Period 2000 to 2004 – Stage 3A Expansion

Year ending 31 December	2000	2001	2002	2003	2004	Total
Nominal $million (dollar values at end of year)						
Pipeline looping (Kwinana Junction to Bunbury)	1.28	0	0	0	0	**1.28**
Compression	18.54	0.72	0.13	0.0	0.0	**19.39**
Metering	0.11	0	0	0	0	**0.11**
Other	0.59	0	0	0	0	**0.59**
Total	**20.51**	**0.72**	**0.13**	**0**	**0**	**21.37**
Real $million (dollar values at 1 January 2005)						
Pipeline looping (Kwinana Junction to Bunbury)	1.42	0	0	0	0	**1.42**
Compression	20.69	0.78	0.14	0	0	**21.61**
Metering	0.12	0	0	0	0	**0.12**
Other	0.65	0	0	0	0	**0.65**
Total	**22.89**	**0.78**	**0.14**	**0**	**0**	**23.81**

164. In the Draft and Final Decisions on the Access Arrangement proposed in December 1999, the then Regulator took the view that forecast New Facilities Investment associated with the Stage 3A expansion of the DBNGP should be incorporated into valuation of the Initial Capital Base rather than being considered as forecast capital costs in 2000.[27] The reasons for this determination of the Regulator were set out in the Regulator's Draft Decision as follows:

- the then owner of the DBNGP (Epic Energy) was placed under an obligation to provide additional capacity of the Stage 3A enhancement by section 5 of schedule 1 of the Dampier to Bunbury Pipeline Act 1997; and
- the bulk of works associated with the forecast New Facilities Investment for 2000 was actually undertaken in 1999, and hence inclusion of this expenditure in the Initial Capital Base was consistent with valuation of the DBNGP at 31 December 1999.

165. The result of this determination of the Regulator was that the following components of forecast New Facilities Investment were removed from the forecast and included in the value of the Initial Capital Base, although not separately identified in that value.

- construction and commissioning of compressors at CS2 and CS7 at a cost of $18.885 million (dollar values of 31 December 1999); and
- final payments for CS10 of $632,000 (dollar values of 31 December 1999).

166. The owner of the DBNGP made no objection after either the Regulator's Draft Decision or Final Decision to inclusion of the relevant amounts of forecast New Facilities Investment in the value of the Initial Capital Base.

[27] Independent Gas Pipelines Access Regulator, 21 June 2001, Draft Decision: proposed Access Arrangement Dampier to Bunbury Natural Gas Pipeline, Part B p. 163; Independent Gas Pipelines Access Regulator, 23 May 2003, Final Decision on the Proposed Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline, paragraphs 300, 309.

167. As a result of the inclusion of this forecast New Facilities Investment in the Initial Capital Base determined for the Current Access Arrangement, the Authority took the view in its Draft Decision on the Proposed Access Arrangement that the value of actual New Facilities Investment on compression facilities related to the Stage 3A expansion should not be rolled into the Capital Base determined at 1 January 2005, to the extent that the value of this investment was taken into account by the Regulator in determining the value of the Initial Capital Base.

168. In a submission made to the Authority subsequent to the Draft Decision, DBP asserts that the Authority's determination to not roll all of the value of capital expenditure associated with the Stage 3A expansion into the Capital Base is inconsistent with the way in which the Initial Capital Base was established and inconsistent with the requirements of the Code.[28] In particular, DBP claims that:

- in establishing the Initial Capital Base, the Regulator must necessarily have taken the Stage 3A costs in question into account as forecast New Facilities Investment for the 2000 to 2004 Access Arrangement Period and, hence, these costs must be treated the same way in determining the Capital Base at 1 January 2005; and

- as the Stage 3A costs in question were incurred after 1 January 2000 (i.e. the date to which the Initial Capital Base relates), there is no basis in the Code for including the costs as part of the Initial Capital Base, and the costs are clearly New Facilities Investment in accordance with section 8.15 of the Code.

169. With regard to the consideration of the Stage 3A costs in determination of the Initial Capital Base, the Authority has reviewed the determination of the Regulator in respect of the Initial Capital Base, including the Regulator's reasons as set out in the Final Decision of May 2003 and the financial models relied on by the Regulator.

170. A matter given weight by the Regulator in establishing a value for the Initial Capital Base for the DBNGP was the value that would be consistent with a $1.00/GJ tariff in 2000 (and escalated for inflation in subsequent years) for gas transmission under a T1 Service as defined by the *Dampier to Bunbury Pipeline Regulations 1998*.[29] The Regulator determined this value to be $1,525 million.[30]

171. The calculation undertaken by the Regulator to derive the asset value of $1,525 million that might be implied by a $1.00/GJ tariff for a T1 Service was in the nature of a "reverse" cost of service calculation whereby the tariff (and hence revenue stream), Rate of Return and cost forecasts are assumed, and the value of the Initial Capital Base calculated. The assumptions about costs made by the Regulator were the same as the cost forecasts used by the Regulator in determining the Total Revenue once the Initial Capital Base had been determined, as set out in other parts of the Regulator's Final Decision.[31] The forecast of New Facilities Investment used in this calculation did not include the costs of the Stage 3A expansion that were then forecast for 2000. If these costs had been included, then the asset value implied by the tariff value of $1/GJ would have been lower than $1,525 million.

[28] DBP Submission #27.

[29] Final Decision, May 2003, paragraph 511.

[30] Final Decision, May 2003, paragraph 513.

[31] Final Decision, May 2003, paragraphs 309 (New Facilities Investment), 330 (Rate of Return) and 515 (Depreciation and Non Capital Costs).

172. The Authority therefore does not accept DBP's assertion that the determination of the Authority expressed in its Draft Decision – to exclude the forecast costs of the Stage 3A expansion from the New Facilities Investment taken into account in the roll forward of the Capital Base to 1 January 2005 – is inconsistent with the Regulator's determination of the Initial Capital Base.

173. In regard to DBP's assertion that the Authority's treatment of Stage 3A costs is inconsistent with the requirements of the Code, the Authority has considered the relevant provisions of the Code.

174. Section 8.15 of the Code, which provides for New Facilities Investment to be added to the Capital Base, is discretionary. That is, section 8.15 states that the Capital Base *may* be increased for New Facilities Investment. Section 8.15 does not automatically provide for New Facilities Investment to be added to the Capital Base, even if that New Facilities Investment satisfies the requirements of section 8.16(a) of the Code.

175. In regard to the Stage 3A costs in question, the Authority therefore has discretion in determining whether or not New Facilities Investment is added to the Capital Base. The Authority takes the view that it is a reasonable exercise of discretion to not include the Stage 3A costs in the Capital Base for the reason that these costs have already been included in the value of the Initial Capital Base and to further add the value of these costs to the Capital Base would have the effect of allowing a "double recovery" of this investment. Accordingly, the Authority does not accept DBP's assertion that excluding the forecast costs of the Stage 3A expansion from the New Facilities Investment taken into account in the roll forward of the Capital Base to 1 January 2005 is inconsistent with requirements of the Code.

176. Further, the Authority is of the view that a prudent Service Provider, acting efficiently in accordance with accepted good industry practice to achieve the lowest sustainable cost of delivering services would not include in its capital costs a double claim in respect of the provision of the same facilities.

177. The Authority therefore maintains the view that the value of actual New Facilities Investment on compression facilities related to the Stage 3A expansion should not be rolled into the Capital Base determined at 1 January 2005, to the extent that a value of this investment was taken into account by the Regulator in determining the value of the Initial Capital Base. This value in dollar values of 1 January 2005 is $21.776 million.

Depreciation

178. For the Proposed Access Arrangement, DBP has used a Cost of Service Methodology for the determination of Total Revenue, consistent with the approach taken by the previous owners of the DBP for the purposes of the Current Access Arrangement.

179. Section 8.9 of the Code provides that, for this methodology, the Capital Base at the beginning of an Access Arrangement Period is determined taking into account "Depreciation for the immediately preceding Access Arrangement Period".

180. "Depreciation" in this provision is a defined term under the Code and 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 group of assets." The

Depreciation Schedule refers to the value of Depreciation determined under section 8.32 of the Code and taken into account in determination of the Reference Tariff.

181. In determining the value of Depreciation for the period 2000 to 2004, DBP has not used the value of Depreciation taken into account in determination of the Reference Tariff for this period, but rather has re-calculated values of Depreciation, both for the Initial Capital Base and New Facilities Investment for the period.

182. DBP has calculated Depreciation of the Initial Capital Base for the period 2000 to 2004 applying different assumptions of remaining asset lives for pipeline, compression and metering assets than were applied in the determination of Depreciation for the purposes of calculation of the Reference Tariff. The different assumptions cause the value of Depreciation taken into account by DBP in determination of the Capital Base at 1 January 2005 to be less than that taken into account in determination of the Reference Tariff in the period 2000 to 2004. The differences in values are indicated as follows.

Initial Capital Base Depreciation 2000 to 2004
(Real $million, dollar values at 1 January 2005)

Year ending 31 December	2000	2001	2002	2003	2004	Total
Applied in Reference Tariff Determination (2000 to 2004)						
Pipelines	27.36	27.36	27.36	27.36	27.36	**136.80**
Compression	13.34	13.34	13.34	13.34	13.34	**66.70**
Metering	0.54	0.54	0.54	0.54	0.54	**2.70**
Other	3.34	3.34	3.34	3.34	3.34	**16.69**
Total	**44.58**	**44.58**	**44.58**	**44.58**	**44.58**	**222.90**
Proposed by DBP to calculate the Capital Base at 1 January 2005						
Pipelines	27.36	27.36	27.36	27.36	27.36	**136.80**
Compression	12.74	12.74	12.74	12.74	12.74	**63.72**
Metering	0.53	0.53	0.53	0.53	0.53	**2.66**
Other	3.34	3.34	3.34	3.34	3.34	**16.69**
Total	**43.98**	**43.98**	**43.98**	**43.98**	**43.98**	**219.88**

183. In determining Depreciation of New Facilities Investment in the period 2000 to 2004 DBP has calculated Depreciation on the basis of *actual* New Facilities Investment in the period rather than applying the value of Depreciation calculated on the basis of forecast New Facilities Investment for the period and taken into account in determination of the Reference Tariff. The differences in values are indicated as follows.

New Facilities Investment Depreciation 2000 to 2004
(Real $million, dollar values at 1 January 2005)

Year ending 31 December	2000	2001	2002	2003	2004	Total
Applied in Reference Tariff Determination (2000 to 2004)						
Pipelines	0.00	0.01	0.01	0.01	0.02	**0.05**
Compression	0.00	0.04	0.21	0.38	0.46	**1.09**
Metering	0.00	0.00	0.00	0.00	0.00	**0.01**
Other	0.00	0.20	0.40	0.62	0.81	**2.03**
Total	**0.00**	**0.24**	**0.62**	**1.02**	**1.29**	**3.18**
Proposed by DBP to calculate the Capital Base at 1 January 2005						
Pipelines	0.00	0.02	0.02	0.02	0.02	**0.09**
Compression	0.00	0.69	0.74	0.74	0.74	**2.91**
Metering	0.00	0.01	0.02	0.03	0.03	**0.10**
Other	0.00	0.19	0.24	0.27	0.30	**0.99**
Total	**0.00**	**0.92**	**1.03**	**1.06**	**1.09**	**4.10**

184. In its Draft Decision, the Authority took the view that the Code requires that the value of Depreciation to be subtracted from the value of the Initial Capital Base is the value of Depreciation that was taken into account in determination of the Reference Tariff for the Current Access Arrangement and determined on the basis of the value of the Initial Capital Base and of the forecast New Facilities Investment. In view of the discrepancies between the values of Depreciation applied by DBP and this approach, the Authority found that the value of Depreciation applied by DBP to the determination of the Capital Base at 1 January 2005 is inconsistent with the requirements of the Code.

185. DBP has indicated disagreement with the determination of the Authority in its Draft Decision that the value of Depreciation for New Facilities Investment should be the value taken into account in determination of the Reference Tariff for the period 2000 to 2004, rather than a value calculated on the basis of actual New Facilities Investment. DBP asserts that there is no requirement under the Code for the value of Depreciation taken into account in determination of a Reference Tariff for a previous period (in this case the period 2000 to 2004) to be also taken into account in determination of a Reference Tariff for a future period (in this case the period 2005 to 2010). DBP further asserts that the Code requires the value of Depreciation to be determined for actual assets that are in existence and, hence, the value of Depreciation cannot be determined on the basis of a forecast of New Facilities Investment.

186. The Authority concurs with DBP that there is no explicit requirement under the Code for the value of Depreciation taken into account in determination of a Reference Tariff for a previous period to be also taken into account in determination of a Reference Tariff for a future period. However, the Authority takes the view that the approach adopted by DBP in calculating a value of Depreciation for New Facilities Investment for the previous Access Arrangement Period is inconsistent with the principles that a Depreciation Schedule (and, hence, values determined for Depreciation) are required to satisfy. In this regard, Section 8.33(d) of the Code provides that the Depreciation Schedule for pipeline assets should be designed:

(d) … 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 the value of that asset or group of assets was first included in the Capital Base, subject to such adjustment for inflation (if any) as is appropriate given the approach to inflation adopted pursuant to section 8.5A).

187. DBP's approach to determination of Depreciation would allow different values of Depreciation to be applied in a roll-forward calculation for the Capital Base than were applied in the determination of Reference Tariffs in the preceding Access Arrangement Period. For example, if actual New Facilities Investment in an Access Arrangement Period is less than was forecast for the purposes of determining Total Revenue and Reference Tariffs for that period, then a recalculation of Depreciation based on actual New Facilities Investment would result in a value of Depreciation being debited to asset accounts that is less than the value notionally recovered through the Reference Tariff and, hence, a higher asset value being rolled forward to the next period than is justified. If this occurs, the value notionally recovered for particular assets through Depreciation allowances in Reference Tariffs over the life of the assets would be more than the original capital cost of the assets. The reverse also applies: if actual New Facilities Investment in an Access Arrangement Period is more than was forecast for the purposes of determining Total Revenue and Reference Tariffs for that period, then the value notionally recovered for particular assets through Depreciation allowances in Reference Tariffs over the life of the assets would be less than the original capital cost of the assets. Either case would be contrary to the requirement of section 8.33(d) of the Code.

188. Moreover, the approach taken by DBP would, if allowed, create a perverse incentive for a Service Provider to overestimate its capital expenditure programme in providing cost forecasts for an Access Arrangement Period and thereby provide opportunity for the value notionally recovered for particular assets through Depreciation allowances in Reference Tariffs over the life of the assets to be more than the original capital cost of the assets. This incentive would arise from the ability to claim the full value of its exaggerated forecast of New Facilities Investment (and an exaggerated Depreciation allowance on this forecast), without reducing the value of the Capital Base in the next Access Arrangement Period by the amount that has already been notionally recovered by Depreciation allowances in the Reference Tariff for the first Access Arrangement Period. This would be contrary to the principle for Depreciation set out in section 8.33(d) of the Code.

189. Taking these matters into account, the Authority maintains the view that the value of Depreciation taken into account in calculation of the value of the Capital Base at 1 January 2005 should be the value of Depreciation taken into account for the purposes of determining the Reference Tariff for the period 2000 to 2004, with adjustment only for the effects of inflation.

Inflation Adjustment

190. Section 8.9 of the Code provides for the value of the Capital Base to be adjusted for inflation as appropriate given the approach to accommodation of inflation in the determination of Total Revenue.

191. For the purposes of determining the Reference Tariff for the Current Access Arrangement, the Regulator calculated Total Revenue on a real basis as contemplated by section 8.15A(b) of the Code, whereby the Capital Base, Depreciation and all costs are expressed in constant (31 December 1999) dollar

values, a real Rate of Return was allowed, and the value of Total Revenue was derived in the same constant dollar values.

192. For the purposes of determining the Reference Tariff for the Proposed Access Arrangement, DBP initially applied a quasi current cost accounting methodology whereby the Capital Base, Depreciation and all costs are expressed in dollar-of-the-day values in each year of the Access Arrangement Period and a real Rate of Return allowed to derive values of Total Revenue in dollar-of-the-day values in each year. Subsequent to the Draft Decision, DBP has revised its Access Arrangement Information and provided the Authority with details of calculations of Total Revenue, with the calculations undertaken on a real basis with all values expressed in dollar values of 1 January 2005.

193. It is consistent with both the past and proposed approach to the determination of Total Revenue that the value of the Capital Base be determined at 1 January 2005 in dollar values at that date. This requires an inflation adjustment of values of the Initial Capital Base, Depreciation and New Facilities Investment for the period 2000 to 2004.

194. To make an inflation adjustment, DBP has applied inflation factors derived from the changes in the Consumer Price Index (Australian Bureau of Statistics: All Groups, Eight Capital Cities) in each calendar year (December to December). The Authority has verified the determination of these inflation factors and is satisfied that they accurately reflect changes in the CPI.

195. In a submission made to the Authority, Western Power questioned whether it is appropriate in making the inflation adjustment to the Capital Base to use (as DBP has done) inflation factors that retain the inflation "spike" resulting from the introduction of the goods and services tax in 2000.

196. In its Draft Decision, the Authority has determined that the inflation adjustment should not be corrected for the effect of introduction of the goods and services tax for the reason that the primary objective in the inflation adjustment of the Capital Base is to maintain the ability of the Service Provider to recover the cost of investment in pipeline assets in real terms. This approach is consistent with the objective for a Reference Tariff stated in section 8.1(a) of the Code (that is, 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). This approach is also consistent with determinations made by other Australian regulators under the Code.

197. The Authority maintains this view in this Final Decision.

Rolled-Forward Value of the Capital Base

198. With corrections made as described above to the values of New Facilities Investment and Depreciation in the period 2000 to 2004, the Authority has determined the value of the Capital Base at 1 January 2005 to be $1,619.60 million in dollar values at that date. The determination of this value and the allocation of this value to asset classes is summarised as follows.

Roll Forward of the Capital Base (corrected by the Authority)
(Real $million, dollar values at 1 January 2005)

Year ending 31 December	2000	2001	2002	2003	2004
Opening Capital Base					
Pipeline	1,491.15	1,465.34	1,438.00	1,410.70	1,383.32
Compressors	249.79	235.45	223.51	210.05	196.21
Meters	20.48	20.58	20.63	20.46	19.89
Other depreciable assets	56.26	58.61	56.55	53.61	50.59
Non depreciable assets	12.09	12.09	12.09	12.09	12.09
Total	1,829.77	1,792.07	1,750.78	1,706.90	1,662.09
New Facilities Investment					
Pipeline	1.55	0.03	0.07	0.00	0.62
Compression	-1.00	1.44	0.09	-0.12	0.18
Metering	0.64	0.58	0.38	-0.03	1.67
Other depreciable assets	5.69	1.48	0.79	0.94	0.90
Non depreciable assets	0.00	0.00	0.00	0.00	0.00
Total	6.87	3.54	1.32	0.79	3.38
Depreciation					
Pipelines	27.36	27.37	27.37	27.38	27.38
Compression	13.34	13.38	13.55	13.72	13.80
Metering	0.54	0.54	0.54	0.54	0.54
Other depreciable assets	3.34	3.54	3.74	3.96	4.15
Non depreciable assets	0.00	0.00	0.00	0.00	0.00
Total	44.58	44.82	45.20	45.60	45.87
Closing Capital Base					
Pipeline	1,465.34	1,438.00	1,410.70	1,383.32	1,356.56
Compressors	235.45	223.51	210.05	196.21	182.59
Meters	20.58	20.63	20.46	19.89	21.02
Other depreciable assets	58.61	56.55	53.61	50.59	47.34
Non depreciable assets	12.09	12.09	12.09	12.09	12.09
Total	1,792.07	1,750.78	1,706.90	1,662.09	1,619.60

Forecast New Facilities Investment

199. Sections 8.15 to 8.21 of the Code provide for capital costs incurred in New Facilities Investment to be included in the Capital Base of a Covered Pipeline, and for capital costs that are forecast for an Access Arrangement Period to be considered in determination of Reference Tariffs for that Access Arrangement Period.

200. Section 8.16 of the Code 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.

201. 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.

202. Section 8.18 of the Code allows for a Reference Tariff Policy to state that the Service Provider will undertake New Facilities Investment that does not satisfy the requirements of section 8.16, and for the Capital Base to be increased by that part of such investment that does satisfy section 8.16 (the "**Recoverable Portion**"). Section 8.19 of the Code allows for an amount of the balance of the investment to be assigned to a Speculative Investment Fund, and to be added to the Capital Base at some future time if the criteria of section 8.16 are met. Section 8.19 also sets out the manner in which the value of the Speculative Investment Fund is determined at any time.

203. Section 8.20 of the Code provides for Reference Tariffs to be determined on the basis of New Facilities Investment that is forecast to occur within the Access Arrangement Period, provided that the investment is reasonably expected to pass the requirements of section 8.16 when the investment is forecast to occur. This does not, however, mean that the forecast New Facilities Investment will automatically be added to the Capital Base after it has occurred (section 8.21). Rather, the Authority will assess whether the investment meets the criteria of section 8.16 of the Code either at the time of review of the Access Arrangement, or at any other time if asked to do so by the Service Provider.

204. Section 8.22 of the Code requires that either the Reference Tariff Policy should describe, or the Authority shall determine, how the New Facilities Investment is to be determined for the purposes of additions to the Capital Base at the commencement of the subsequent Access Arrangement Period. 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).

205. Sections 8.23 to 8.26 of the Code set out provisions for New Facilities Investment to be financed in whole or in part by Capital Contributions from Users, or from surcharges over and above Reference Tariffs to be charged to Users.

206. For its Draft Decision, the Authority considered a forecast of New Facilities Investment provided by DBP, as follows.

Forecast New Facilities Investment 2005 to 2010
(Nominal $million, dollar values at end of year)

Year ending 31 December	2005	2006	2007	2008	2009	2010	Total
Pipelines	88.91	275.19	0.00	226.84	101.28	0.00	**692.23**
Compression	100.50	117.79	0.00	0.00	0.00	0.00	**218.29**
Metering	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Other depreciable assets	13.16	13.97	7.30	9.01	10.06	9.29	**62.79**
Non-depreciable assets	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Total	**202.57**	**406.95**	**7.30**	**235.85**	**111.34**	**9.29**	**973.30**

207. Subsequent to the Draft Decision, DBP provided the Authority with a revised forecast of New Facilities Investment, as follows. The Authority had indicated in its Draft Decision that it expected that such a revised forecast would be provided given the status of DBP's capital planning process at the time of the Draft Decision.

DBP Revised Forecast of New Facilities Investment 2005 to 2010

Year ending 31 December	2005	2006	2007	2008	2009	2010	Total
Nominal $million (dollar values at end of year)							
Pipelines	4.62	6.06	275.28	304.62	95.42	169.53	**855.54**
Compression	3.79	72.53	127.02	44.93	0.47	0.72	**249.47**
Metering	1.16	1.30	0.17	0.00	0.00	0.00	**2.62**
Other depreciable assets	4.12	3.35	1.72	6.09	7.44	7.08	**29.80**
Non-depreciable assets	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Total	**13.69**	**83.24**	**404.19**	**355.64**	**103.33**	**177.34**	**1137.43**
Real $million ($ values at 1 January 2005)							
Pipelines	4.50	5.74	254.23	273.96	83.57	144.59	**766.59**
Compression	3.69	68.79	117.31	40.41	0.41	0.62	**231.22**
Metering	1.13	1.23	0.15	0.00	0.00	0.00	**2.51**
Other depreciable assets	4.01	3.18	1.59	5.48	6.51	6.04	**26.81**
Non-depreciable assets	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Total	**13.33**	**78.94**	**373.28**	**319.84**	**90.50**	**151.25**	**1027.14**

208. In Annexure 2 of the Access Arrangement Information, DBP sets out a division of forecast New Facilities Investment into "expansion capex" and "stay-in-business capex", as follows.

Forecast New Facilities Investment 2005 to 2010

Year ending 31 December	2005	2006	2007	2008	2009	2010	Total
Nominal $million (dollar values at end of year)[32]							
Expansion							
Pipeline looping	0.51	0.00	272.34	302.11	93.20	167.97	836.13
Compression	0.00	69.23	124.52	44.48	0.00	0.00	238.23
Stay-in-business	13.17	14.00	7.33	9.05	10.13	9.37	63.06
Total	**13.69**	**83.24**	**404.19**	**355.64**	**103.33**	**177.34**	**1137.43**
Real $million (dollar values at 1 January 2005)							
Expansion							
Pipeline looping	0.50	0.00	251.51	271.70	81.62	143.26	748.59
Compression	0.00	65.66	115.00	40.00	0.00	0.00	220.66
Stay-in-business	12.83	13.28	6.77	8.14	8.87	7.99	57.89
Total	**13.33**	**78.94**	**373.28**	**319.84**	**90.50**	**151.25**	**1027.14**

209. DBP has also provided in Annexure 2 of the Access Arrangement Information a breakdown of stay-in-business capital expenditure into capital projects, and information on each project to justify the expenditures by satisfaction of one or more of the conditions of section 8.16(a)(ii) of the Code.

210. Under section 8.20 of the Code, the Authority is required to determine whether the forecast of New Facilities Investment provided by DBP, in whole or in part, can reasonably be expected to satisfy the conditions of section 8.16(a) of the Code when the investment is forecast to occur. That is, the Authority is required to determine whether it may reasonably be expected that:

- the amount of forecast New Facilities Investment would not exceed the amount that would be invested by a prudent Service Provider acting efficiently, in accordance with accepted good industry practice, and would achieve the lowest sustainable cost of delivering services; and

- the amount and nature of the New Facilities Investment would satisfy one of three tests: anticipated incremental revenue exceeds the expected cost; the expenditure has system wide benefits; or the expenditure is necessary to maintain the safety and integrity of the network.

211. Under Section 8.2(e) of the Code, the Authority is further required to satisfy itself that any forecasts submitted by DBP, which are required for setting the Reference Tariffs, represent "best estimates arrived at on a reasonable basis".

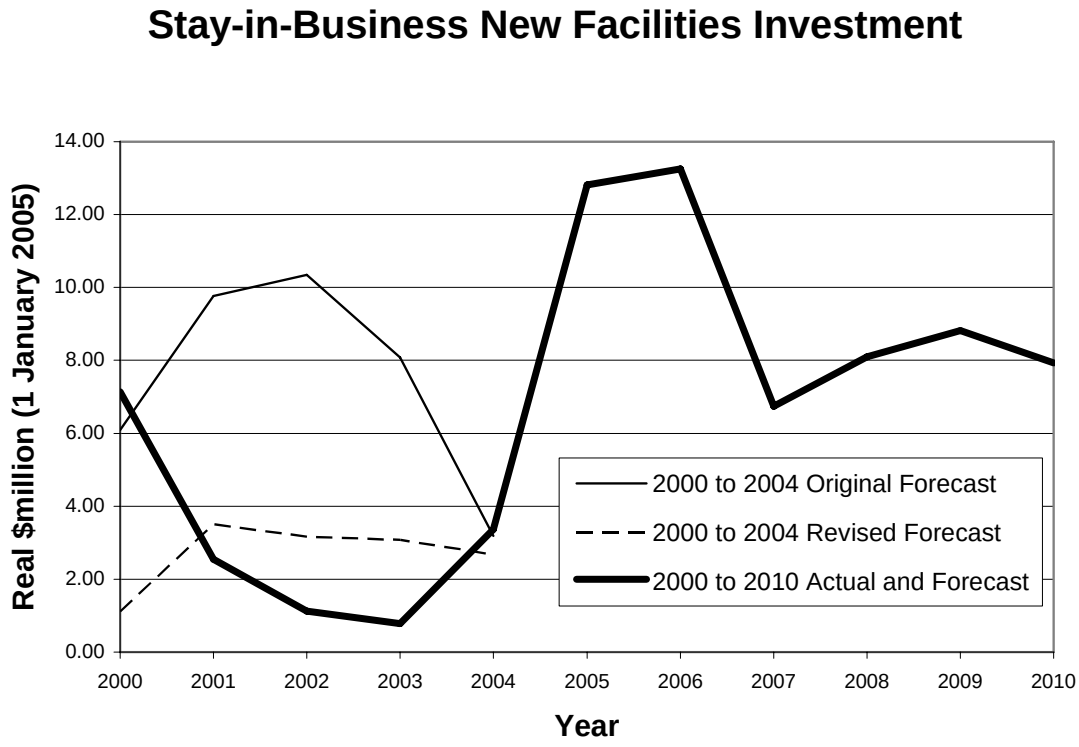
[32] Nominal values are derived from the real values with an assumed inflation rate of 2.74 per cent per annum. The nominal values differ slightly from values indicated in the Access Arrangement Information due to a different assumed inflation rate. Total Revenue is determined on the basis of the real values.

212. The Authority has separately considered the stay-in-business and expansion components of the forecast New Facilities Investment.

213. DBP has described the stay-in-business component of forecast New Facilities Investment as "by and large, a relatively large number of recurring capital projects of relatively small value".[33] This is supported by the descriptions of these capital projects that are largely in the nature of works associated with the renewal, upgrading or protection of assets.

214. The Authority generally expects that, as the DBNGP is an approximately 20 year old pipeline, annual capital expenditures of this type would remain approximately constant in real terms, or be increasing with the scale of the DBNGP assets.

215. The time series of forecast New Facilities Investment identified by DBP as of a stay-in-business nature is shown in the figure below, together with capital expenditure considered by the Authority to fall in the category of stay-in-business expenditure in the original forecast of New Facilities Investment for the Current Access Arrangement, the forecast of New Facilities Investment for the Current Access Arrangement as revised by the then Regulator, and the actual New Facilities Investment for 2000 to 2004.



216. The forecast stay-in-business New Facilities Investment for 2005 to 2010 is of a broadly similar average annual value (in real values) to that originally forecast for the 2000 to 2004 Access Arrangement Period at about $8 million per annum. This is also similar to the value of actual New Facilities Investment of this type in 2000.

[33] Access Arrangement Information, Annexure 2, paragraph 1.4.

217. The Authority has noted in this Final Decision the Service Provider's submission as to the financial distress of the previous owners of the DBNGP and the effect that this may have had in constraining capital expenditures (paragraph 160). The effect of the financial circumstances of the previous owners in the period 2001 to 2004 is consistent with the time series of actual and forecast stay-in-business New Facilities Investment that shows a substantial decline from 2000 to 2003, and a relatively high level in 2005 and 2006.

218. On the basis of indications that the stay-in-business New Facilities Investment comprises capital projects in the nature of renewals and upgrades, and actual and forecast expenditures are consistent with an approximately constant average annual value of this investment in real terms over the period 2000 to 2010, the Authority accepts the forecast of this component of New Facilities Investment as likely to meet the conditions of section 8.16 of the Code when the investment occurs.

219. In regard to forecast New Facilities Investment for expansion in the Capacity of the DBNGP, the Authority has considered whether forecast New Facilities Investment for expansion in the Capacity of the DBNGP may reasonably be expected to satisfy the conditions of section 8.16(a) of the Code.

220. DBP has provided as part of the Access Arrangement Information, forecasts of demand for Full Haul Services that indicate an expectation of a substantial increase in demand that could only be satisfied by investment in expanding the Capacity of the DBNGP. These forecasts are summarised as follows.

DBP Forecast of Demand for Full Haul Services

Year ending 31 December	2005	2006	2007	2008	2009	2010
Contracted capacity (TJ/day)	594.2	614.2	690.0	744.9	762.1	799.7
Throughput (TJ/day)	572.9	591.6	659.4	713.3	729.9	764.5

221. The Authority accepts that there is likely to be substantial investment in expansion of pipeline Capacity during the Access Arrangement Period and has given consideration to whether such investment can reasonably be expected to meet the requirements of section 8.16(a) of the Code.

222. In this regard, the first matter that the Authority is required to consider is whether the amount of forecast New Facilities Investment for expansion of Capacity would 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 delivering services (section 8.16(a)(i) of the Code).

223. The Authority is satisfied that, with an investment of the scale envisaged by DBP in expansion of Capacity of the pipeline, there is a substantial incentive for the Service Provider to seek efficiency in the nature of the works undertaken for the expansion of Capacity, and in the costs incurred in undertaking those works. Moreover, the Authority notes that as DBP expects only a very limited sale of Reference Services at the Reference Tariff during the Access Arrangement Period, there is a substantial incentive for DBP to be conservatively low in its estimate of New Facilities Investment as a high estimate would give rise to a risk to DBP of a lower value of the Capital Base at the end of the Access Arrangement Period without the benefit of revenue from higher tariffs during that period (as a high estimate would have the effect of reducing the value of the Capital Base at the end of the Access Arrangement Period through the value of Depreciation of the *forecast* New Facilities Investment, while the Capital Base would be increased by the value of *actual* New Facilities Investment).

Taking these factors into account, the Authority accepts that the forecast New Facilities Investment for expansion of Capacity can reasonably be expected to meet the requirement of section 8.16(a)(i) of the Code.

224. The second matter that the Authority is required to consider is whether the amount and nature of the New Facilities Investment for expansion of Capacity would satisfy at least one of three tests: anticipated incremental revenue exceeds the expected cost; the expenditure has system-wide benefits; or the expenditure is necessary to maintain the safety and integrity of the network.

225. The forecast New Facilities Investment relating to expansion of the DBNGP is not directed at maintaining the safety or integrity of the pipeline and, accordingly, the Authority has considered only whether the investment would give rise to incremental revenue that exceeds the expected cost, or have system-wide benefits.

226. In order to determine whether the proposed New Facilities Investment is likely to give rise to incremental revenues in excess of incremental cost and/or generate system-wide benefits through a reduction in the average cost of gas transmission, DBP has provided the Authority with, and the Authority has itself undertaken, an indicative analysis to compare the average cost of Full Haul gas transmission under the forecast of costs and pipeline throughput provided by DBP with an alternative scenario of zero New Facilities Investment in expansion of pipeline Capacity and zero growth in pipeline throughput.[34] These analyses suggest that the forecast average cost of Full Haul gas transmission over the Access Arrangement Period would be reduced by about three per cent by the forecast New Facilities Investment in expansion of pipeline Capacity and the forecast increases in throughput. On this basis, the Authority is satisfied that the forecast New Facilities Investment is envisaged to give rise to incremental revenues in excess of incremental costs during the Access Arrangement Period.

227. The Authority has also considered whether the expansion in Capacity of the DBNGP could have system-wide benefits through improving reliability in delivery of Services. The Authority recognises that while some options for expanding the Capacity of the DBNGP may improve reliability (for example, duplication of compressor facilities), this is not necessarily the case for all options. In the absence of further information from DBP on the nature of capital works to be undertaken for the expansion of Capacity, the Authority is unable to find that the New Facilities Investment would have system-wide benefits through improvement in the reliability of Services.

228. The Authority considers, however, that consideration of system-wide benefits may reasonably extend beyond simply the operation of the DBNGP, and include benefits to users of gas that rely on the DBNGP. In this regard, the Authority is aware that the expansion in Capacity of the DBNGP is in the interests of a substantial number of the Users of the DBNGP and correspondingly in the public interest, and that such expansion may be frustrated by risk that the investment would not be rolled into the Capital Base.

[34] This analysis is made on the basis of cost and throughput forecasts provided by DBP in the Access Arrangement Information with final year (2010) costs and throughput carried forward for a further five years. The "zero growth" scenario involves zero new facilities investment in expansion of pipeline capacity, constant pipeline throughput at the forecast level for 2005, and constant operating expenditure in real terms.

229. On the basis of information before it, the Authority is therefore satisfied that the forecast New Facilities Investment relating to expansion of pipeline Capacity is likely to meet the conditions of section 8.16(a)(ii) of the Code.

230. For the purposes of this Final Decision and consideration of Reference Tariffs, the Authority has therefore taken into account the New Facilities Investment for both stay-in-business works and expansion of Capacity as forecast by DBP.

231. A matter related to New Facilities Investment of the nature proposed by DBP is the redundancy and disposal of some assets. In its Draft Decision, the Authority gave consideration to the prospect that some of the existing compressor units of the DBNGP will be made redundant and disposed of following replacement of these units with larger units as part of the expansion of the pipeline. The Authority took the view that, given the potentially significant disposal value of any compressor assets disposed of during the Access Arrangement Period, the Proposed Access Arrangement should be amended to make provision for a Redundant Capital mechanism that makes provision for the disposal value of these assets to be subtracted from the Capital Base at the commencement of the ensuing Access Arrangement Period. The following amendment was required under the Draft Decision.

> The Proposed Access Arrangement should be amended to include in the Reference Tariff Policy a Redundant Capital mechanism that provides for the disposal value of any compression assets made redundant during the Access Arrangement Period to be removed from the value of the Capital Base at the commencement of the ensuing Access Arrangement Period. (Draft Decision Amendment 7)

232. In a submission to the Authority subsequent to the Draft Decision, DBP has indicated that under the current programme for expansion of the DBNGP, there are no plans for existing compressor assets to be made redundant, but rather existing compressors will be maintained in service as part of a strategy to maintain the reliability of contracted Capacity.[35] In light of this submission, the Authority no longer maintains the view that it is desirable for the Access Arrangement to include a Redundant Capital Mechanism as contemplated by the Draft Decision.

Rate of Return

233. 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

[35] DBP Submission #27

> Regulator is satisfied that to do so would be consistent with the objectives contained in section 8.1.

234. DBP has calculated a value of Total Revenue using a Cost of Service methodology in accordance with section 8.4 of the Code, and in this calculation has accounted for inflation by use of a current cost accounting financial model. Under this model, costs in each year of the Access Arrangement Period, including the value of the Capital Base, are expressed in dollar-of-the-day values. The return on assets is calculated in each year by multiplying the opening value of the Capital Base in each year by a real pre-tax rate of return.

235. DBP has determined a Rate of Return as a weighted average cost of capital ("**WACC**"). A cost of equity has been estimated using the capital asset pricing model ("**CAPM**") and a cost of debt estimated as the sum of a risk free rate of return, an estimate of the corporate debt margin, and an estimate of the cost of raising debt.

236. The real pre-tax Rate of Return proposed by DBP is 7.24 per cent, corresponding to a nominal pre-tax Rate of Return of 9.98 per cent.

237. In its Draft Decision, the Authority took the view that DBP's proposed Rate of Return lies within a range of values that different minds acting reasonably might attribute to the Rate of Return, applying the methodology of the CAPM that was chosen by DBP. The Rate of Return has not been addressed in any submissions made subsequent to the Draft Decision and the Authority therefore maintains this view.

Depreciation

238. Sections 8.32 to 8.35 of the Code relate to depreciation of assets that form part of the Capital Base, for the purposes of determining a Reference Tariff.

239. Section 8.32 defines a Depreciation Schedule as:

> the 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.

240. Section 8.33 requires that the Depreciation Schedule 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 the value of that asset or group of assets was first included in the Capital Base, subject to such adjustment for inflation (if any) as is appropriate given the approach to inflation adopted pursuant to section 8.5A).

241. Section 8.34 provides for the application of depreciation principles in the determination of Total Revenue using internal rate of return or net present value methodologies. If the internal rate of return or net present value methodology is used, then the notional depreciation over the Access Arrangement Period for each asset or group of assets that form part of the Capital Base is:

(a) for an asset that was in existence at the commencement of the Access Arrangement Period, the difference between the value of that asset in the Capital Base at the commencement of the Access Arrangement Period and the value of that asset that is reflected in the Residual Value; and

(b) for a New Facility installed during the Access Arrangement Period, the difference between the actual cost or forecast cost of the Facility (whichever is relevant) and the value of that asset that is reflected in the Residual Value,

and, to comply with section 8.33:

(c) the Residual Value of the Capital Base should reflect notional depreciation that meets the principles of section 8.33; and

(d) the Reference Tariff should change over the Access Arrangement Period 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 towards the end of the Access Arrangement Period, particularly where the calculation of the Reference Tariffs has assumed significant market growth and the pipeline has been sized accordingly).

242. Section 8.35 of the Code provides for the cash flow needs of the Service Provider to be recognised in the determination of the Depreciation Schedule:

> 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.

243. In the Access Arrangement Information, DBP indicates that it has determined a separate Depreciation Schedule for each of four groups of physical assets that form the DBNGP, and that Depreciation during the Access Arrangement Period has been determined by applying the straight-line methodology.

244. In its financial model used for the determination of Reference Tariffs, DBP has determined Depreciation separately for the value of assets in the Initial Capital Base (determined at 31 December 1999 and adjusted for inflation for each year of the proposed Access Arrangement Period 2005 to 2010) and for the value of New Facilities Investment made subsequent to 1 January 2000. Asset lives assumed for the purposes of determining Depreciation are as follows.

DBP Proposed Depreciation Schedule: Assumed Asset Lives

Asset class	Asset life for new assets	Remaining asset life for assets of the Initial Capital Base (at 31 December 2004)
Pipeline assets	70	49.50
Compression assets	30	14.60
Metering assets	50	33.50
Other depreciable assets	30	11.85

245. On the basis of these asset lives, the Capital Base determined by DBP at 31 December 2004 and forecast New Facilities Investment for the period 2005 to 2010, DBP has determined the Depreciation Schedule for the period 2005 to 2010 as follows.

DBP Proposed Depreciation Schedule
(Real $million, dollar values at 1 January 2005)

Year ending 31 December	2005	2006	2007	2008	2009	2010
Pipeline assets	27.39	27.46	27.54	31.17	35.08	36.28
Compression assets	13.49	13.61	15.91	19.82	21.16	21.19
Metering assets	0.60	0.62	0.64	0.65	0.65	0.65
Other depreciable assets	3.67	3.80	3.90	3.96	4.14	4.36
Total	**45.14**	**45.49**	**47.99**	**55.59**	**61.04**	**62.46**

246. On the basis of this Depreciation Schedule and the proposed New Facilities Investment, DBP has projected a roll-forward of the Capital Base over the proposed Access Arrangement Period as follows.

DBP Projected Roll-Forward of the Capital Base
(Real $million, dollar values at 1 January 2005)

Year ending 31 December	2005	2006	2007	2008	2009	2010
Capital Base at beginning of year	1,643.47	1,611.66	1,645.10	1,970.39	2,234.64	2,264.10
New Facilities Investment	13.33	78.94	373.28	319.84	90.50	151.25
Depreciation	45.14	45.49	47.99	55.59	61.04	62.46
Capital Base at end of year	1,611.66	1,645.10	1,970.39	2,234.64	2,264.10	2,352.89

247. DBP's proposed depreciation methodology and assumptions as to asset lives are consistent with the Depreciation Schedule applied in determining the Reference Tariff for the Current Access Arrangement, although there have been minor changes to assumptions of asset lives as a result of DBP having, for the purposes of the Proposed Access Arrangement, calculated depreciation for assets that were included in the Initial Capital Base at 31 December 1999 on the basis of asset classes whereas for the purposes of the Current Access Arrangement, asset lives were specified for a more detailed breakdown of assets into asset classes and pipeline zones. The Authority is of the view that these changes in asset lives are not material and the Authority is satisfied that the depreciation methodology and assumed asset lives are consistent with the requirements of section 8.33 of the Code.

248. As noted above in this Final Decision, the Authority is proposing to not allow all New Facilities Investment for the period 2000 to 2004 as submitted by DBP to be rolled into the Capital Base. Taking these matters into account, the revised Depreciation Schedule and projected roll-forward of the Capital Base over the proposed Access Arrangement Period are as follows.

Depreciation Schedule Revised by the Authority

Year ending 31 December	2005	2006	2007	2008	2009	2010
Real $million, dollar values at 1 January 2005						
Pipeline assets	27.39	27.46	27.54	31.17	35.08	36.28
Compression assets	12.54	13.37	15.66	19.58	20.92	20.94
Metering assets	0.60	0.60	0.60	0.60	0.60	0.60
Other depreciable assets	3.67	3.80	3.91	3.96	4.14	4.36
Total	**44.19**	**44.52**	**47.03**	**54.62**	**60.07**	**61.49**

Projected Roll-Forward of the Capital Base Revised by the Authority

Year ending 31 December	2005	2006	2007	2008	2009	2010
Real $million, dollar values at 1 January 2005						
Capital Base at beginning of year	1,619.60	1,588.74	1,623.15	1,949.40	2,214.62	2,245.05
New Facilities Investment	13.33	78.94	373.28	319.84	90.50	151.25
Depreciation	44.19	44.52	47.03	54.62	60.07	61.49
Capital Base at end of year	1,588.74	1,623.15	1,949.40	2,214.62	2,245.05	2,334.81

Non Capital Costs

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

> 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.

DBP Forecast of Non Capital Costs

250. DBP indicates in the Access Arrangement Information that it has used the following forecast of Non Capital Costs in determination of Total Revenue and Reference Tariffs for the proposed Access Arrangement Period. This forecast has been revised by DBP subsequent to issue by the Authority of its Draft Decision.

DBP Forecast Non Capital Costs 2005 to 2010

Year ending 31 December	2005	2006	2007	2008	2009	2010	Total
Nominal $million, dollar values at end of year							
Wages and salaries	5.38	5.63	5.89	6.17	6.46	6.76	**36.29**
Materials and services	35.83	34.33	47.94	46.44	44.82	46.69	**256.05**
Corporate overheads	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Fuel gas	22.45	23.13	33.94	35.63	36.41	37.18	**188.75**
Total	**63.66**	**63.09**	**87.77**	**88.24**	**87.69**	**90.64**	**481.09**

DBP Forecast Non Capital Costs 2005 to 2010

Year ending 31 December	2005	2006	2007	2008	2009	2010	Total
Real $million, dollar values at 31 December 2004							
Wages and salaries	5.24	5.34	5.44	5.55	5.66	5.77	**32.99**
Materials and services	34.90	32.56	44.27	41.76	39.25	39.82	**232.57**
Corporate overheads	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Fuel gas	21.86	21.93	31.34	32.05	31.89	31.71	**170.79**
Total	**61.99**	**59.83**	**81.06**	**79.36**	**76.80**	**77.30**	**436.34**

251. DBP has provided explanatory information on Non Capital Costs in submissions to the Authority separate from the Access Arrangement Information.[36]

252. In this information, DBP provides a breakdown of Non Capital Costs into recurrent and non-recurrent costs. DBP describes the differentiation of recurrent and non-recurrent costs as follows.[37]

> To facilitate analysis, Operator has divided its non capital costs into:
>
> (a) recurrent costs: costs which Operator incurs each year in operating and maintaining the DBNGP and which, with the exception of fuel gas costs, are relatively constant (in real terms) from one year to the next; and
>
> (b) non recurrent costs: costs which Operator incurs in operating and maintaining the DBNGP but which are not routinely incurred each year.
>
> Costs classified by Operator as recurrent costs include:
>
> (a) programmed maintenance of the pipeline itself;
>
> (b) programmed maintenance at compressor stations;
>
> (c) programmed maintenance of metering facilities; and
>
> (d) costs of operating the business of transporting gas in the DBNGP.
>
> Costs classified by Operator as non recurrent costs include:
>
> (a) major overhauls of compressor units: these overhauls are required, in accordance with manufacturers' specifications, after the units have completed a number of hours (typically, 30,000 hours) in service, and the number of major overhauls required varies from year to year, resulting in a significant variation in total non capital costs;
>
> (b) major overhauls of other items of plant (for example, gas engine alternators), and other major maintenance activities, which vary from year to year in accordance with manufacturers' specifications and utilisation;
>
> (c) regulatory costs: costs incurred by Operator in preparing and submitting revisions to the DBNGP Access Arrangement, and in participating in the revisions approval process, and costs incurred by the Regulator during its review and approval of access arrangement revisions and subsequently passed through to Operator;
>
> (d) other major costs incurred which may, from time to time, be incurred by Operator in its provision and operation of the DBNGP, and in operating the business of transporting gas in the pipeline.

253. DBP's revised forecast of recurrent and non-recurrent costs is as follows.[38]

[36] DBP, Submissions #4, #12, #15, #25, #29 and #33.

[37] DBP Submission #33.

DBP Non Capital Costs – 2005 to 2010
(nominal $million, dollar values at end of year)

Year ending 31 December	2005	2006	2007	2008	2009	2010
Recurrent Costs						
Salaries and wages	5.377	5.629	5.893	6.169	6.458	6.761
Asset services	0.289	0.302	0.315	0.329	0.344	0.359
Administration	0.724	0.756	0.790	0.825	0.862	0.901
Transport services	1.465	1.531	1.600	1.672	1.748	1.827
Land management	0.920	0.945	0.971	0.997	1.025	1.053
Engineering services	2.103	2.186	2.272	2.362	2.455	2.553
Field services	10.690	11.117	11.562	12.025	12.509	13.012
ANS corporate costs	6.977	7.304	7.647	8.005	8.380	8.773
OSA fee	2.073	2.128	2.185	2.244	2.304	2.366
Insurance	4.244	4.358	4.475	4.595	4.719	4.846
Equity raising cost	1.451	1.490	1.530	1.571	1.613	1.657
Asymmetric risk cost	0.200	0.205	0.211	0.217	0.222	0.228
Corporate overheads	0.000	0.000	0.000	0.000	0.000	0.000
Total Recurrent Costs	**36.513**	**37.952**	**39.451**	**41.013**	**42.640**	**44.336**
Non-Recurrent Costs						
Liquidated damages insurance	0.000	1.472	3.603	2.160	0.670	1.388
Regulatory costs	0.800	0.000	0.000	0.000	0.000	0.913
Regulatory review costs	0.800	0.000	0.000	0.000	0.000	0.913
Field services	3.097	0.536	10.778	9.436	7.966	5.904
Total Non-Recurrent Costs	**4.697**	**2.008**	**14.381**	**11.596**	**8.636**	**9.119**
Fuel Gas	**22.447**	**23.128**	**33.939**	**35.634**	**36.415**	**37.183**
Total Non Capital Costs	**63.657**	**63.087**	**87.771**	**88.242**	**87.691**	**90.638**

254. DBP has submitted the following information and reasoning as justification for the forecast of Non Capital Costs.[39]

255. First, DBP submits that the revised forecast of Non Capital Costs provided to the Authority subsequent to the Draft Decision was derived by a budgeting process developed subsequent to the preparation of the initial Proposed Access Arrangement documents. DBP further submits that, as part of this budgeting process, attention was given to the costs necessary for compliance with the safety case for the pipeline, pipeline licence and other mandatory requirements, maintenance plans, audits of corporate and operating functions, as well as a number of elements of a strict budgeting process.[40] DBP submits that these characteristics of the budgeting process provide reason for the Authority to approve the cost forecast.

256. The information provided by DBP suggests that the revised forecast of costs for 2005 is based on a sound and rigorous budget process.

[38] DBP Submission #33 and Financial Model

[39] DBP Submission #29

[40] DBP Submission #29

257. Second, DBP provides comparisons of forecast costs for 2005 with actual Non Capital Costs for 2004, as follows.[41]

DBP Comparison of Forecast Non Capital costs for 2005 with Actual Non Capital Costs for 2004

Year ending 31 December	2004 Actual	2005 Forecast ($2005)
Wages and salaries	5.505	5.377
Materials and services	29.551	35.833
Corporate overheads	12.644	0.000
Fuel gas	21.800	22.447
Total	**69.500**	**63.657**

Year ending 31 December	2004 Actual	2005 Forecast ($2005)
Recurrent Costs		
Salaries and wages	5.505	5.377
Asset services		0.289
Administration	0.473	0.724
Transport services	0.363	1.465
Land management	0.886	0.920
Engineering services	1.111	2.103
Field services	10.236	10.690
ANS corporate costs	-	6.977
OSA fee	-	2.073
Insurance	5.531	4.244
Equity raising cost	-	1.451
Asymmetric risk cost	-	0.200
Corporate overheads	12.644	
Total Recurrent Costs	**36.749**	**36.513**
Non-Recurrent Costs		
Liquidated damages insurance	-	0
Regulatory costs	3.026	0.800
Regulatory review costs		0.800
Field services	7.890	3.097
Total Non-Recurrent Costs	**10.916**	**4.697**
Fuel Gas	**21.835**	**22.447**
Total Non Capital Costs	**69.500**	**63.657**

[41] DBP Submission #29 and Financial Model. DBP indicates that "It should be noted that in providing the above information, the 2004 Actuals were arrived at using information provided by the Operator's prior owner. The prior owner recorded costs using different cost categories. While the total amount for the 2004 Actuals is clear, Operator has not been able to achieve an exact reconciliation of the components of the total."

258. DBP indicates that with subtraction of abnormal items totalling $15.890 million from the 2004 costs, subtraction of fuel gas costs, and inflation of 2004 costs to 2005 dollar values (inflation rate of 2.5 per cent), the relevant measure of actual costs in 2004 is $32.6 million (in dollar values of 31 December 2005). DBP indicates that this compares with recurrent costs forecast for 2005 of $32.7 million (adjusted to subtract the notional costs of asymmetric risk and equity raising costs). DBP submits that the difference of $0.2 million (0.6 per cent) is immaterial, implying that with adjustment for abnormal items, non-recurrent costs, fuel gas costs and notional costs included in the forecast for regulatory purposes, the forecast costs for 2005 are directly comparable with the actual costs for 2004.

259. The Authority has considered DBP's comparison of the revised forecast costs for 2005 with the actual costs incurred in 2004, but is not satisfied that the comparison is totally correct. A comparison of stated recurrent costs for 2004 (adjusted as proposed by DBP and with escalation for inflation) with forecast costs for 2005 (adjusted to subtract the notional costs for asymmetric risk and equity raising) indicates an increase in recurrent costs of $5.4 million, or 18 per cent.

260. Third, DBP submits that the total Non Capital Costs (excluding fuel gas) are reasonably consistent with the original forecast of total Non Capital Costs (excluding fuel gas) for 2004 of $31.24 million (in dollar values of 31 December 2005).[42]

261. Fourth, the Authority notes that, contrary to DBP's claim that the 1999 forecast of Non Capital Costs for 2004 and the current forecast for 2005 are similar, this is not the case if forecast non-recurrent costs, equity raising costs and asymmetric risk costs for 2005 (totalling $6.35 million) are included in the comparison, meaning that the relevant comparator for forecast 2005 costs is $41.21 million, representing an increase of 32 per cent.

262. Fifth, DBP has provided comparative information on two cost indices for several Australian transmission pipelines:

- Non Capital Costs (excluding cost of fuel gas) per kilometre per unit of gas throughput; and
- Non Capital Costs (excluding cost of fuel gas) per kilometre per compressor station.

[42] As indicated by the Authority at paragraph 244 of the Draft Decision.

263. The comparative information provided by DBP is reproduced as follows (with the information for the DBNGP updated to reflect the revised forecast of costs provided subsequent to the Draft Decision).

DBP Benchmarked Non Capital Costs 2004

	DBNGP[a]	MSP[b]	PTS [c]	GGP[d]	MAP[e]	ADP[f]
Inputs						
Gas throughput (PJ)	221.0	95.4	224.9	69.0	95.0	16.9
Pipeline length (km)	1,523	1,938	1,434	1,378	1,259	1,513
No. compressor stations	10	3	3	2	8	1
Non Capital Costs excl. fuel gas ($million)	40.85	24.96	18.56	12.71	15.94	8.75
Benchmarks						
Non Capital Costs excl. fuel gas per km per PJ ($/km/PJ)	105	135	58	134	133	342
Non Capital Costs excl. fuel gas per km per compressor station ($/km/compressor station)	2,635	4,293	4,314	4,612	1,583	5,785

a. Proposed Non Capital Costs for 2005 expressed in 2004 dollars.
b. Moomba to Sydney Pipeline: not inclusive of fuel gas because this is provided by shippers.
c. GasNet Principal Transmission System (Victoria): Excluding fuel gas costs for Brooklyn compressor station operation to transport gas from Longford to refill Western Underground Storage
d. Goldfields Gas Pipeline: not inclusive of fuel gas because this is provided by shippers.
e. Moomba to Adelaide Pipeline: gas throughput assumed to be 95 PJ per annum, on the basis that MAPS capacity is fully utilised.
f. Amadeus to Darwin Pipeline: not inclusive of fuel gas because this is provided by shippers.

264. DBP indicated that, on each measure, the DBNGP ranked second lowest among the six pipelines compared, providing assurance that the forecasts of Non Capital Costs for the pipeline are reasonable. This ranking remains the same with the revised forecast of Non Capital Costs.

265. Finally, DBP has also provided explanatory information on other Non Capital Cost line items as follows.

- Equity raising costs: annual cost estimated at 0.224 per cent of regulated equity, consistent with an amount allowed by the Australian Competition and Consumer Commission ("ACCC") in its approval of proposed revisions to the Access Arrangement for the Victorian Gas Transmission System.[43]

- Asymmetric risks: annual cost estimate at $0.2 million (in 2005) for non-insurable risks including computer crime, general property (special risks), accounts receivable, computer breakdown/business interruption, customer credit risk, crisis management/ contingency expenses, intellectual property, residual value of leased assets, employment practices, environmental impairment, legal actions, statutory liabilities, extortion, extraterritorial workers' compensation and death or disability of key personnel. The allowance of $0.2 million was determined on the basis of the same value having been allowed by the Australian Competition

[43] Australian Competition and Consumer Commission, 13 November 2002, Final Decision GasNet Australia Access Arrangement Revisions for the Principal Transmission System. p151. The Authority notes that the values of equity raising costs actually included in its forecast of operating costs are less than would be determined by the methodology applied by the ACCC.

Tribunal in proposed revisions to the Access Arrangement for the Victorian Gas Transmission System.[44]

- Liquidated damages insurance: DBP is required under some contracts with Users to obtain liquidated damages insurance covering the failure to complete pipeline expansions on time. Allowances for this insurance are estimates of insurance costs and are as follows:

DBP Forecast Costs of Liquidated Damages Insurance (nominal $million, dollar values at end of year)

	2005	2006	2007	2008	2009	2010
Insurance cost	0	1.47	3.60	2.16	0.67	1.39

- Fuel gas: DBP has used a model to forecast requirements for fuel gas and other system-use gas taking into account pipeline configurations and throughput, and contracts for the supply of gas. Forecast gas use and costs are as follows.

DBP Forecast Fuel and System-Use Gas (nominal $million, dollar values at end of year)

	2005	2006	2007	2008	2009	2010
Quantity of gas (PJ)	23.85	27.17	38.97	39.87	39.92	39.82
Cost (nominal $million)	22.45	23.13	33.94	35.63	36.41	37.18

266. Under section 8.37 of the Code, the Authority is required to determine whether the forecast Non Capital Costs are costs that would 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.

267. Under section 8.2(e) of the Code, the Authority is also required to be satisfied that any forecasts submitted by DBP, which are required for setting the Reference Tariffs, represent "best estimates arrived at on a reasonable basis".

268. For the forecast of Non Capital Costs provided as part of the Proposed Access Arrangement, DBP derived is forecast by establishing a cost forecast for the first year of the proposed Access Arrangement Period and then projecting this forecast into subsequent years on the basis of trends in recurrent costs and specific predictions of non-recurrent costs.

269. DBP appears to have used a similar methodology to derive the most recent forecast of Non Capital Costs, although this is not explicitly stated in submissions made to the Authority in respect of the revised forecast.

270. The Authority agrees with the approach taken by the Victorian Essential Services Commission as such an approach has the desirable incentive properties of deriving forecasts of costs from actual costs of the preceding regulatory period (establishing costs for a base year and applying a trend) and was also applied in deriving forecasts of Non Capital Costs for the Victorian gas distributors.[45] In this case the Victorian Essential Services Commission took the actual Non Capital Costs incurred in a single year (2001) as the starting point for consideration of the appropriate forecast for the

[44] Application by GasNet Australia (Operations) Pty Ltd [2003] ACompT 6,

[45] Essential Services Commission, October 2002, Review of Gas Access Arrangements Final Decision, page 76.

first year of the proposed Access Arrangement Period (2003). The focus of the assessment of the appropriate forecast was whether there was justification for any "step change" in costs between the two years.

271. Taking into account the past practice of the Victorian Essential Services Commission and the desirable incentive properties of deriving forecasts of costs from actual costs of the preceding regulatory period (consistent with the general scheme of the Code), the Authority accepts that the approach taken by DBP in deriving the forecast of Non Capital Costs is reasonable and appropriate. The Authority has made an assessment of whether DBP's application of this approach, and whether the forecast thus derived, meets the requirements of section 8.37 and 8.2(e) of the Code.

272. The first step in the Authority's assessment is to consider DBP's forecast of recurrent costs for 2005.

273. Subsequent to the Draft Decision, DBP has provided the Authority with substantial information on the forecast of recurrent costs for 2005. This has been summarised above, together with the Authority's assessments of the information provided. The Authority's conclusions on this information are that:

- the forecast of recurrent costs for 2005 appear to be based on a sound and rigorous budget process (paragraphs 255 and 256);
- while the total of forecast costs for 2005 is similar to DBP's stated actual costs for 2004, taking into account abnormal items, costs of a notional nature and inflation, the forecast of costs for 2005 represents an increase over actual costs of 2004 in the order of 18 per cent (paragraph 259);
- taking into account inflation, the forecast of costs for 2005 represents an increase over the previous forecast of costs for 2004 in the order of 32 per cent (paragraph 261);
- cost indices for the DBP appear to compare favourably with those of other gas transmission pipelines throughout Australia (paragraph 264).

274. The Authority is concerned as to the apparent forecast increase in recurrent costs from 2004 to 2005. The Authority is satisfied, however, that some level of cost increase may be justified by the artificially low costs that may have been incurred by the previous owner of the pipeline in 2004 due to relative financial distress, and also by additional costs that may be incurred by DBP in programmes to expand the Capacity of the pipeline. Taking this into account, together with the favourable comparison of cost indices for DBP with those of other Australian transmission pipelines and the apparent rigour of DBP's budgeting process, the Authority takes the view that the forecast of recurrent costs for 2005 is reasonable and meets the requirements of section 8.37 and 8.2(e) of the Code.

275. The second step in the Authority's assessment is to consider DBP's forecast of trends in recurrent costs for the period 2005 to 2010.

276. DBP appears to have applied trends in recurrent Non Capital Costs as follows.

DBP trends underlying forecasts of recurrent costs

Cost item	Trend Assumption
Salaries and wages ANS corporate costs	Annual real increase of 1.95 per cent.
Transport services	Annual real increase of approximately 1.78 per cent
Administration	Annual real increase of approximately 1.75 per cent.
Field services	Annual real increase of approximately 1.29 per cent
Engineering services	Annual real increase of approximately 1.24 per cent
Land management	Annual real increase of approximately 0.04 per cent
OSA fee Insurance Equity raising cost Asymmetric risk cost	Constant in real terms
Total recurrent costs	Annual real increase of approximately 1.24 per cent

277. In submissions made in support of its original forecast of Non Capital Costs, DBP indicated that trends in recurrent costs were based on:

- escalating the "labour component" of the recurrent costs for 2005 at an annual escalation rate equal to the percentage rate of change in the CPI plus two per cent, indicated to be consistent with recent observed rates of growth in labour costs of three per cent in real terms and expected productivity improvements of one per cent; and

- escalating the non-labour component of recurrent costs at an annual escalation rate equal to the rate of change in the CPI.

278. It is not apparent from more recent information in submissions from DBP whether the same methodology has been applied in deriving the most recent forecasts, although the approximately two per cent real increases in wages and salaries and lesser increases for cost items that have both a labour and materials component suggest that this may have been the case.

279. The Authority considers that an assumed trend in recurrent Non Capital Costs should reflect cost increases that an efficient Service Provider could reasonably be expected to incur over the Access Arrangement Period as well as productivity gains that an efficient Service Provider could reasonably be expected to achieve.

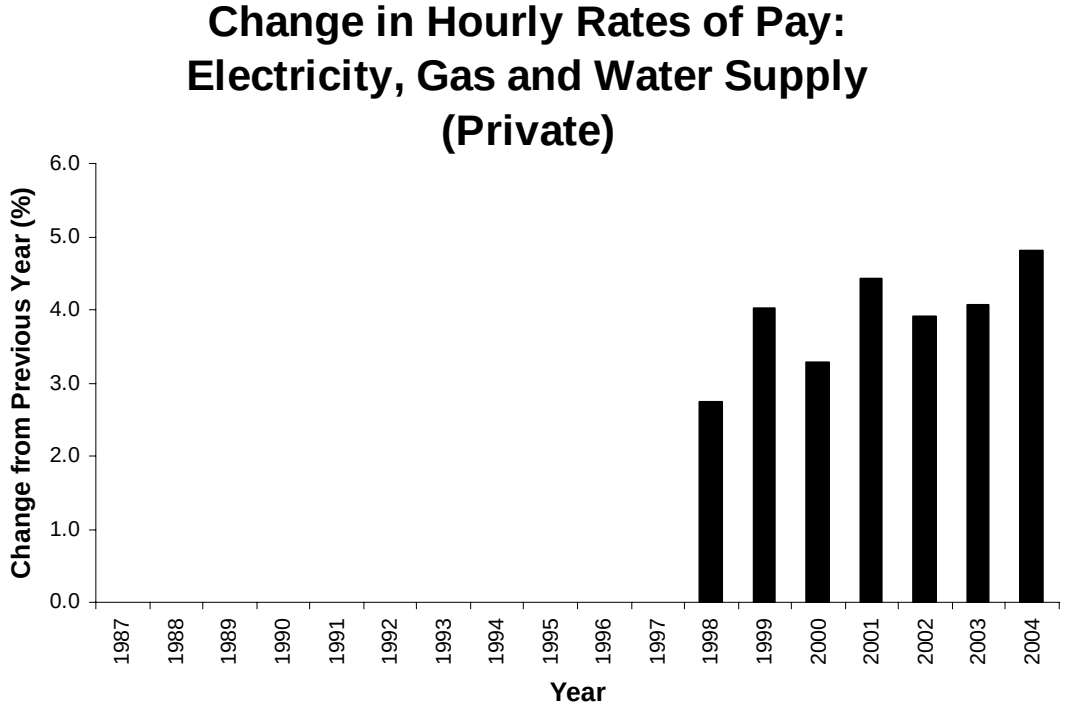
280. In support of its assumption on labour costs, DBP previously cited Australian Bureau of Statistics data on historical real increases in labour rates in the electricity, gas and water industries.[46]

[46] DBP Submission #4.

281. DBP also indicates that it has assumed productivity gains of one per cent per annum in labour costs, although the basis of this assumption is not stated. No productivity gains have been assumed for other costs.

282. The Authority has examined the assumptions made by DBP in respect of trends in recurrent costs by reference to recent statistics on labour costs and productivity improvements.

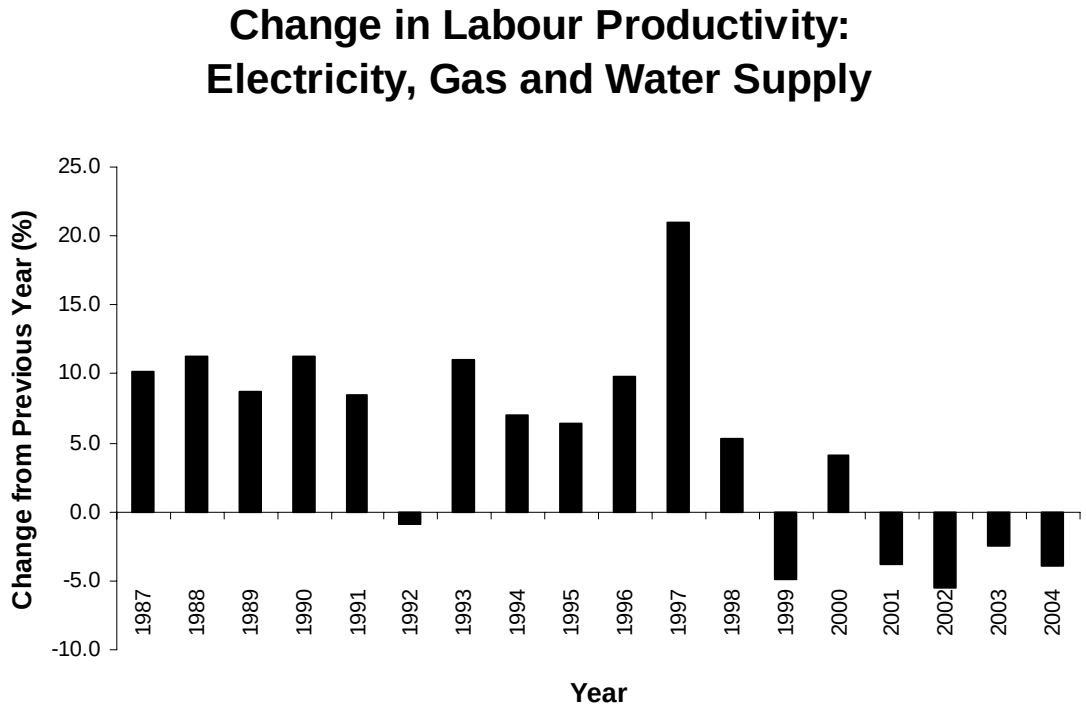
283. Labour cost statistics of the Australian Bureau of Statistics for the private-sector electricity, gas and water supply industries are indicated in the following figure.[47] These data indicate increasing nominal labour costs at rates of between 2.8 and 4.8 per cent per annum in the period 1998 to 2004 and suggest that DBP's assumed rate of increase in labour costs of three per cent real (approximately 5.5 per cent nominal) may be marginally higher than is justified by recent observed increases. However, given the rising trend in rates of growth in labour costs and anecdotal evidence of shortages of skilled labour in the pipeline and related industries, the Authority considers DBP's assumption to be reasonable.



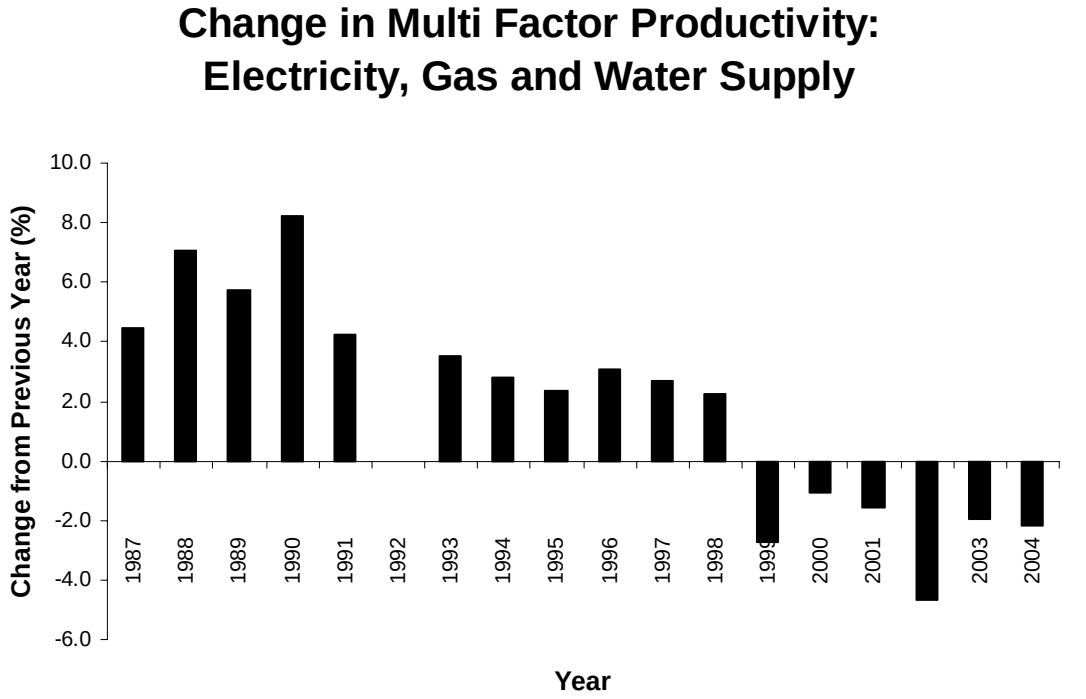
284. Labour productivity statistics of the Australian Bureau of Statistics for the electricity, gas and water supply industries are indicated in the following figure. These data indicate a static or declining labour productivity (measured as gross value added per hour worked) since 1999 after a period of substantial productivity improvements from 1987 to 1998.[48] While these data are not necessarily indicative of the opportunities for productivity improvements in any particular business, they do suggest that the assumption by DBP of labour productivity gains of one per cent per annum is conservatively high by industry sector benchmarks.

[47] Australian Bureau of Statistics, Bulletin 5204 Table 25.

[48] Australian Bureau of Statistics, Bulletin 6345.0 Table 5b.



285. Multi factor productivity statistics show a similar trend to labour productivity statistics, as shown in the figure below.[49]



[49] Productivity Commission, Industry Sector Productivity, http://www.pc.gov.au/commission/work/productivity/performance/industry.html

286. Given the recent history of productivity changes in the electricity, gas and water supply sector, the Authority consider the assumptions made by DBP in respect of trends in labour costs, productivity growth and, hence, in recurrent costs to be reasonable.

287. The third step in the Authority's assessment of DBP's forecast of Non Capital Costs is the consideration of DBP's forecast of non-recurrent costs.

288. DBP has provided a forecast of non-recurrent costs for the period 2005 to 2010 as reproduced in paragraph 253 of this Final Decision

289. DBP has indicated that non-recurrent cost items relate to:[50]

- major overhauls of compressor units: these overhauls are required, in accordance with manufacturers' specifications, after the units have completed a number of hours (typically, 30,000 hours) in service, and the number of major overhauls required varies from year to year, resulting in a significant variation in total non capital costs;
- major overhauls of other items of plant (for example, gas engine alternators), and other major maintenance activities, which vary from year to year in accordance with manufacturers' specifications and utilisation;
- regulatory costs: costs incurred by Operator in preparing and submitting revisions to the DBNGP Access Arrangement, and in participating in the revisions approval process, and costs incurred by the Regulator during its review and approval of access arrangement revisions and subsequently passed through to Operator;
- other major costs incurred which may, from time to time, be incurred by Operator in its provision and operation of the DBNGP, and in operating the business of transporting gas in the pipeline.

290. The Authority accepts that the forecasts of non-recurrent costs are reasonable given the expansion plans for the pipeline, and therefore accepts that these costs meet the requirements of section 8.37 and 8.2(e) of the Code.

291. The final step in the Authority's assessment of the forecast of Non capital Costs is the consideration of fuel-gas costs.

292. Subsequent to the Draft Decision, DBP has provided a revised forecast of fuel-gas costs, as reproduced in paragraph 253 of this Final Decision.

293. The methodology applied by DBP involves the calculation of the fuel gas requirement for deliveries of gas in each year given a particular pipeline configuration in the year (i.e. number and power of compressor stations, lengths of pipeline looping, assumptions as to operating pressures, etc.). For a given pipeline configuration, fuel gas requirements are calculated for several different quantities of gas deliveries and a polynomial function fitted to the data points thus derived to indicate fuel-gas requirements as a function of gas deliveries for the assumed pipeline configuration. Fuel gas requirements for delivery of forecast quantities of gas are then derived from this function.[51]

[50] DBP Submission #33

[51] DBP Confidential Submission #4

294. The Authority is satisfied that the methodology applied by DBP is, in principle, consistent with common practice for the pipeline industry and appropriate for the estimation of fuel gas requirements for the DBNGP.

295. The Authority considers, however, that in applying the methodology to the calculation of fuel gas requirements, DBP has double-counted the fuel-gas requirements for Part Haul Services, and hence overestimated fuel gas costs by $19.20 million in nominal dollar values ($17.46 million in dollar values of 1 January 2005) over the proposed Access Arrangement Period.

296. DBP's calculation of fuel gas requirements and forecast costs was undertaken as follows.[52]

- DBP derived the forecast cost of fuel gas for total deliveries of gas by calculation of the fuel-gas requirements and cost for deliveries of gas to Kwinana Junction equal to the forecast total deliveries of gas under Full Haul and Part Haul Services, other than Part Haul Services to Delivery Points in the Pilbara Region.

- DBP derived the forecast cost of fuel gas for Full Haul deliveries of gas by calculation of fuel gas requirements and cost for deliveries of gas to Kwinana Junction equal to the forecast Full Haul deliveries of gas.

- DBP derived the forecast cost of fuel gas for Part Haul deliveries of gas by taking the difference between the cost values derived by the first two calculations.

297. The Authority considers that this approach over-estimates the requirements for fuel gas for the following reasons.

298. Firstly, the second of these calculations (calculation of fuel gas requirements for Full Haul gas deliveries only) appears to involve a determination of fuel gas requirements for Full Haul deliveries *given* assumptions about Part Haul deliveries and, hence, the losses of pressure in the pipeline that occur as a result of Part Haul deliveries. As such, the fuel gas requirements determined by the second of these calculations would appear to implicitly include the fuel gas requirements for Part Haul deliveries. The first calculation, in which DBP purports to determine the fuel gas requirements for total deliveries of gas, would therefore double count the fuel gas requirements for Part Haul deliveries.

299. Secondly, even if the first of the above calculations did not have the effect of implicitly double counting the fuel gas requirements for Part Haul deliveries, it would tend to over-estimate the fuel gas requirements for Part Haul deliveries as it treats all Part Haul deliveries as if they were Full Haul deliveries, i.e. deliveries to Kwinana Junction and involving gas passing through all compressor stations CS1 to CS9 rather than the actual (and fewer) numbers of compressor stations between the relevant receipt points and delivery points.

300. Given the double counting in the forecast of fuel gas costs, the Authority takes the view that the forecast of fuel-gas costs (and, hence, the forecast of Non Capital Costs) does not meet the requirements of sections 8.37 and 8.2(e) of the Code, and this forecast should be reduced by the value of fuel-gas costs attributed by DBP to Part Haul Services. The Authority has therefore taken into account the following forecast of Non Capital Costs in the determination of Total Revenue.

[52] DBP Confidential Financial Model 15 August 2005

Forecast Non Capital Costs 2005 to 2010 Revised by the Authority

Year ending 31 December	2005	2006	2007	2008	2009	2010	Total
Nominal $million, dollar values at end of year							
Wages and salaries	5.38	5.63	5.89	6.17	6.46	6.76	**36.29**
Materials and services	35.83	34.33	47.94	46.44	44.82	46.69	**256.05**
Corporate overheads	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Fuel gas	19.84	20.38	30.04	32.24	33.07	33.98	**169.54**
Total	**61.07**	**60.36**	**83.93**	**84.92**	**94.43**	**87.55**	**462.26**
Real $million, dollar values at 31 December 2004							
Wages and salaries	5.24	5.34	5.44	5.55	5.66	5.77	**32.99**
Materials and services	34.90	32.56	44.27	41.76	39.25	39.82	**232.57**
Corporate overheads	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Fuel gas	19.32	19.32	27.74	28.99	28.96	28.98	**153.32**
Total	**59.45**	**57.22**	**77.46**	**76.31**	**73.87**	**74.57**	**418.88**

Total Revenue

301. Sections 8.4 and 8.5 of the Code require that the revenue to be generated from the sales (or forecast sales) of all Services over the Access Arrangement Period (the Total Revenue) be determined, or be able to be expressed in terms of, one of three 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.

302. Section 8.5A of the Code provides for different methodologies for dealing with the effects of inflation in the Total Revenue and Reference Tariff calculation.

> 8.5A Any of the methodologies described in section 8.4 or permitted under section 8.5, may be applied:
>
> (a) on a nominal basis (under which the Capital Base and Depreciation are expressed in historical cost terms and all other costs and revenues are expressed in current prices and a nominal Rate of Return is allowed);or
>
> (b) on a real basis (under which the Capital Base, Depreciation and all costs and revenues are expressed in constant prices and a real Rate of Return is allowed); or
>
> (c) on any other basis in dealing with the effects of inflation,
>
> provided that the basis used is specified in the Access Arrangement, is approved by the Relevant Regulator and is applied consistently in determining the Total Revenue and Reference Tariffs.

303. Section 8.6 of the Code recognises that a range of values may be attributed to the Total Revenue by the above methodologies. This recognises the manner in which the Rate of Return, Capital Base, Depreciation Schedule and Non Capital Costs may be determined, in each case involving the exercise of the Authority's discretion. Section 8.6 provides that, in order to determine an appropriate value within this range, the Authority may have regard to any financial and operational performance indicators considered by the Authority to be relevant in order to determine the level of costs within the range of feasible outcomes under section 8.4 of the Code that is most consistent with the objectives of section 8.1 of the Code. 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.

304. For the Proposed Access Arrangement, DBP has used a Cost of Service methodology for determining Total Revenue. For the purposes of deriving a Total Revenue and Reference Tariff for the proposed Access Arrangement as originally submitted, DBP applied this methodology in accordance with a quasi-current cost accounting methodology, under which the Capital Base, Depreciation and all other costs and revenues are expressed in dollars of the day values in each year of the proposed Access Arrangement Period and a return on the Capital Base is calculated by application of a real Rate of Return. The Total Revenue was determined for each year in dollar of the day values. In calculating a Reference Tariff, a Reference Tariff value for 2005 was determined such that the present value of revenue from the Reference Tariff over the Access Arrangement Period (where the Reference Tariff was assumed to be escalated at the rate of inflation) is forecast to be equal to the present value of that part of Total Revenue allocated to the Reference Service, where present values in both cases were calculated with a discount rate equal to a nominal Rate of Return.

305. Subsequent to the Draft Decision, DBP has provided the Authority with revised forecasts of costs and a revised calculation of Total Revenue and a Reference Tariff. In this revised calculation, DBP has applied the Cost of Service methodology in real terms, under which the Capital Base, Depreciation and all other costs and revenues are expressed in dollars values at 31 December 2004 and a return on the Capital Base is calculated by application of a real Rate of Return. The Total Revenue was determined for each year in real values. Similar to the calculations as originally submitted, a Reference Tariff value for 2005 was determined such that the present value of revenue from the Reference Tariff over the Access Arrangement Period (where the Reference Tariff was assumed to be escalated at the rate of inflation) is forecast to be equal to the present value of that part of Total Revenue allocated to the Reference Service, where present values in both cases were calculated with a discount rate equal to the real Rate of Return.

306. The derivation of DBP's proposed Total Revenue for determination of a Reference Tariff for the Tf Service (as revised subsequent to the Draft Decision) is summarised as follows.[53]

DBP Proposed Total Revenue
(Real $million, dollar values at 31 December 2004)

Year ending 31 December	2005	2006	2007	2008	2009	2010
Return on Assets	118.95	116.64	119.07	142.61	161.73	163.87
Depreciation	45.14	45.49	47.99	55.59	61.03	62.46
Non Capital Costs	59.45	57.22	77.46	76.31	73.87	74.57
Total	223.55	219.35	244.52	274.51	296.64	300.90
Present Value (nominal discount rate of 7.24 per cent)	**1,212.06**					

307. The Authority is satisfied that the methodology applied by DBP in calculating Total Revenue, and in dealing with the effects of inflation in the determination of the Reference Tariff, is consistent with the requirements of sections 8.4 and 8.5 of the Code.

308. As indicated earlier in this Final Decision, the Authority is not satisfied that the values proposed by DBP for the Capital Base and Non Capital Costs are appropriate values under the relevant provisions of the Code. In these circumstances, the Authority has itself determined revised values for these cost parameters. In the case of the Non Capital Costs, the Authority has made a straight-forward calculation to correct for an apparent error in derivation of the forecast (in respect of forecast costs of fuel gas). In doing so, the Authority recognises that there is uncertainty in the forecast of Non Capital Costs. The Authority also recognises that, while it has accepted DBP's proposals, there is uncertainty in the forecast of New Facilities Investment and in the appropriate Rate of Return.

309. Section 8.6 of the Code contemplates that it is possible that uncertainties in each of the cost components of Total Revenue may cause a range of values to be attributed to Total Revenue in which event the Authority is required to determine the value of Total Revenue within this range that is most consistent with the objectives contained in section 8.1.

[53] This determination of Total Revenue excludes the costs of fuel gas allocated to part haul services.

310. The Authority has therefore given consideration to the objectives of section 8.1 of the Code in determining a value of Total Revenue from within a feasible range.

311. Section 8.1 of the Code provides that a Reference Tariff and Reference Tariff Policy (and, hence, the Total Revenue from which the Reference Tariff is derived) 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.

To the extent that any of these objectives conflict in their application to a particular Reference Tariff determination, the Authority may determine the manner in which they can best be reconciled or which of them should prevail, by reference to the factors set out in section 2.24 of the Code.

312. The objective of 8.1(a) is to give the Service Provider the "opportunity" to earn a "stream of revenue" that recovers the efficient costs over the expected life of the assets used. Accordingly, a value higher in a range of Total Revenue would provide greater assurance that this objective would be met.

313. In the Epic Decision, the Supreme Court held that section 8.1(b) refers to a "workably competitive market", being a market in which past investments and risks taken may provide some justification for prices above the efficient level. However, there is no evidence before the Authority that such circumstances exist in this case so this factor would point to a lower value in a range of Total Revenue, reflecting the efficient cost of provision of Services.

314. With respect to section 8.1(c), there is no evidence to suggest that any values within a range of Total Revenue that may result from consideration of reasonable ranges for New Facilities Investment and Non Capital Costs would not enable the safe and reliable operation of the pipeline.

315. The Authority is of the view that the first limb of section 8.1(d) has been adequately addressed in the determination of the Capital Base incorporating New Facilities Investment from the last Access Arrangement Period.

316. The second limb of section 8.1(d) is concerned with not distorting investment decisions in upstream and downstream industries. To the extent that a higher value of Total Revenue risks resulting in a price for pipeline Services that is in excess of efficient costs, this objective would point to lower values within the range of Total Revenue.

317. Section 8.1(e) is concerned with the interests of Users and Prospective Users and would point to a lower value in the range, although the longer term interests of Users

and Prospective Users require a level of Total Revenue consistent with motivating investment in expansion of the pipeline.

318. Section 8.1(f) is concerned with provision of incentives to a Service Provider to reduce costs and develop the market for pipeline Services. Such incentives arise from the structure of the Reference Tariff and Incentive Mechanisms in the Reference Tariff Policy and do not point to any particular value of Total Revenue.

319. Section 8.1(a) therefore points to a higher value of Total Revenue within a feasible range, while sections 8.1(b), (d) and (e) point to a lower value in a range. Given that the objectives in section 8.1 conflict in their application to the determination of the Total Revenue, the Authority must determine the manner in which they can best be reconciled or which of them should prevail by reference to the factors in section 2.24(a) to (g).

320. Section 2.24(a) is concerned with the Service Provider's legitimate business interests and investment in the pipeline and, in accordance with the objectives of sections 8.1(a) and (d) (first limb), would point to higher values in the range of Total Revenue, or at least to values at or close to the values proposed by the Service Provider.

321. Section 2.24(b) relates to firm and binding contractual obligations of the Service Provider. No issue is raised as to the firm and binding contractual obligations of the Service Provider in this case, so section 2.24(b) does not assist in the reconciliation of the section 8.1 objectives.

322. Section 2.24(c) relates to requirements for the safe and reliable operation of the pipeline. For the reasons referred to above in relation to section 8.1(c), section 2.24(c) does not assist in determining an appropriate value for Total Revenue in this case.

323. Section 2.24(d) directs attention to the "economically efficient" operation of a pipeline. This factor is consistent with the objectives of sections 8.1(b), (d) (second limb) and (e) and a lower value of Total Revenue.

324. Section 2.24(e) relates to the public interest, including the public interest in having competition in markets. For the DBNGP, there is a substantial public interest in expansion of the pipeline. Section 2.24(e) is consistent with the objective of section 8.1(d) (first limb) and a higher value of Total Revenue consistent with ensuring incentives for investment.

325. Section 2.24(f) is concerned with the interests of Users and Prospective Users and would point to a lower value in a range.

326. The Authority has not given consideration to any additional matters under section 2.24(g).

327. After considering the matters in section 2.24 there remains an unresolved tension between the outcomes that would be indicated for Total Revenue by each of the objectives in section 8.1. Accordingly, it is necessary for the Authority to resolve this tension and determine an appropriate value for Total Revenue.

328. The Authority is of the view that ensuring recognition of forecast New Facilities Investment for expansion of the pipeline will be in the interests of the Service Provider under sections 8.1(a) and 2.24(a), the interests of Users and Prospective

Users under section 8.1(d), (f) and, consequently, the public interest under section 2.24(e) in meeting the future gas demands of Western Australia.

329. The Authority is of the view that the Rate of Return proposed by DBP complies with the requirements of the Code. The Authority is also of the view that a value of Total Revenue derived from the Rate of Return proposed by DBP would be consistent with the objectives of section 8.1.

330. The Authority is of the view that there is an error in DBP's forecast of Non Capital Costs (in respect of the forecast of fuel gas costs) and that correction of this error is consistent with the objectives of section 8.1 of the Code to the extent that these objectives seek to have Total Revenue reflect efficient costs of Service provision, and that such a correction is consistent with the interests of Users and Prospective Users while not inconsistent with the legitimate business interests of DBP.

331. The Authority has not considered financial and operational performance indicators for the purposes of determining a value of Total Revenue under section 8.6 of the Code. A determination of Total Revenue and Reference Tariffs under the Code is predicated on the use of benchmarks of costs and financial structure for the particular pipeline rather than, necessarily, the particular costs and financial structure of the Service Provider's business. In this way, problems of the financial decisions of the regulated entity being distorted by application of the regulatory regime are largely avoided. However, the use of these benchmark assumptions means that any consideration of financial performance indicators calculated on the basis of the same assumptions would be tautological: such an analysis would simply show that the benchmark cost assumptions made on the basis of deemed adequacy for the financial sustainability of the business are indeed adequate. Conversely, a consideration of financial indicators for the actual business of the Service Provider would potentially create the incentive problems that the use of benchmark assumptions seeks to avoid. As such, the Authority considers that it is only in special circumstances of the Service Provider that financial indicators should be bought to account in a determination of Total Revenue. In the case of the DBNGP, DBP has not made any submission that such indicators should be taken into account by the Authority, and the Authority does not have any information before it that would provide reason to take into account the particular financial circumstances of DBP in making a determination on the value of Total Revenue.

332. The Authority has therefore determined that the appropriate value of Total Revenue is that derived from the cost parameters as proposed by DBP, but with corrections made to the value of Total Revenue to reflect the Authority's corrections to calculation of the Capital Base and to DBP's forecast of Non Capital Costs as set out in this Final Decision.

333. The Authority has therefore undertaken a determination of Total Revenue with revised values of cost parameters, as follows.

Parameter values in the Authority's determination of Total Revenue (Real $million at 1 January 2005)

Capital Base (at 31 December 2004)	$1,619.60 million					
New Facilities Investment	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
	13.33	78.94	373.28	319.84	90.50	151.25
Rate of Return	7.24% real pre-tax					
Depreciation	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
	44.19	45.52	47.03	54.62	60.07	61.49
Non Capital Costs	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
	59.45	57.22	77.46	76.31	73.87	74.57

334. The derivation of the Authority's revised Total Revenue is summarised as follows.[54]

Value of Total Revenue derived by the Authority (Real $million at 1 January 2005)

Year ending 31 December	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Return on Assets	117.22	114.99	117.48	141.09	160.29	162.49
Depreciation	44.19	44.52	47.03	54.62	60.07	61.49
Non Capital Costs	59.45	57.22	77.46	76.31	73.87	74.57
Total	220.87	216.73	241.96	272.02	294.22	298.55
Present Value (Real discount rate of 7.24 per cent)	**1,200.08**					

Cost/Revenue Allocation and Reference Tariff

335. In determining Reference Tariffs, a Service Provider must determine (explicitly or implicitly) the costs or share of costs of pipeline operation that will be recovered from revenues from Reference Services and other Services. Principles for the allocation of costs/revenues between Services are provided in sections 8.38 to 8.43 of the Code.

336. Section 8.38 of the Code requires that Reference Tariffs should be designed to only recover 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.

[54] Information from the Authority's financial model used to calculate Total Revenue and Reference Tariffs is provided in Appendix 2 of this Final Decision.

337. Section 8.39 of the Code provides for the Authority to require a different methodology to be used for cost/revenue 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.

338. Section 8.40 of the Code addresses the allocation of Costs/Revenue between Reference Services and Rebatable Services. A Rebatable Service is one where a portion of any revenue realised from sales of the Service is rebated to Users (either through a reduction in the tariff or through a direct rebate to the relevant User or Users). 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.

339. 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.

340. Section 8.41 provides a Service Provider with discretion to adopt alternative approaches to cost/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.

341. Section 8.42 relates to the allocation of costs/revenue between Users. This section requires that, subject to provisions for prudent discounts in section 8.43 of the Code, the Reference Tariff 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.

342. 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 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).

343. 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 pipeline Services. 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.

344. DBP has proposed only a single Reference Service, the Tf Service, which is a Full Haul Service. For the purposes of determining a Reference Tariff, DBP made two key assumptions concerning cost allocation:

- all Users of Full Haul Services are Users of the Reference Service; and
- the Reference Tariff is set to recover all of the Total Revenue except for an amount attributed to Part Haul Services, this amount being an estimate of the cost of fuel gas used to provide Part Haul Services.

345. DBP's reason for allocation of only the costs of fuel gas to provision of Part Haul Services is that the DBNGP has been constructed and expanded to meet the needs of Users of Full Haul Services and, as such, the only additional cost of provision of Part Haul Services is the cost of incremental use of fuel gas in the provision of the Part Haul Services.

346. The Reference Tariff proposed by DBP for the Tf Service comprises two charges:

- a Commodity Tariff of 0.106313/GJ in 2005, set at a value to recover the cost of fuel gas (net of the cost of fuel gas allocated to Users of Part Haul Services); and
- a Capacity Reservation Tariff of $0.939022/GJ MDQ in 2005, set at a value to recover all other costs.

347. The corresponding 100 per cent load factor tariff proposed by DBP for the Tf Service is $1.045335 for 2005.

348. The two charges of the Reference Tariff were specified by DBP for the calendar year 2005, and were calculated on the assumption that the charges would be escalated at 100 per cent of the annual rate of change in the Consumer Price Index ("**CPI**").

349. DBP did not allocate any part of Total Revenue to Services other than the Tf Service and Part Haul Services. As such, no part of Total Revenue has been allocated to Non-Reference Services. DBP has not sought to treat any Non-References Services as Rebatable Services within the meaning of section 8.40 of the Code.

350. The Authority has given consideration to the cost allocation and Reference Tariff proposed by DBP in the context of determinations in this Final Decision that:

- the Authority is not satisfied that the value of Total Revenue proposed by DBP meets the requirements of the Code and has revised this value; and

- the Proposed Access Arrangement should be amended to include Part Haul and Back Haul Services as Reference Services.

351. The Authority has also given consideration to whether some or all of the Non-Reference Services described by DBP in the Services Policy of the Proposed Access Arrangement should be Rebatable Services within the meaning of section 8.40 of the Code.

352. These matters are addressed in turn below.

Allocation of Total Revenue and Reference Tariffs

353. As a result of the Authority's requirement under this Final Decision for the Proposed Access Arrangement to be amended to include Part Haul and Back Haul Services as Reference Services, the Authority has determined Reference Tariffs for these Services.

354. In the Draft Decision, the Authority determined Reference Tariffs for the Part Haul and Back Haul Services by applying the distance-based formula for determining regulated tariffs for Part Haul Services under the *Dampier to Bunbury Pipeline Regulations 1998* prior to the Access Arrangement for the DBNGP coming into effect in 2004. The Authority acknowledged in the Draft Decision, however, that DBP may wish to make submissions on the determination of Reference Tariffs (and implicit allocation of costs) for these Services.

355. Subsequent to the Draft Decision, DBP has made a submission to the Authority setting out an alternative cost allocation between Part Haul and Back Haul Services.[55] DBP has proposed that various cost items be allocated to Users on the basis of three allocators:

- GJ MDQ;
- GJ MDQ km; and
- GJ throughput km.

356. Under DBP's proposal, costs allocated to Part Haul and Back Haul Services according to these allocators would still be recovered by two charges: a Capacity Reservation Charge (in units of $/GJ MDQ/km) and a Commodity Charge (in units of $/GJ /km).

357. DBP's stated reasons for allocation of costs by these allocators are that:

- costs which are not related to the distance over which gas is transported should be allocated according to each User's reserved capacity (GJ MDQ);
- costs which are related to the provision of infrastructure should be allocated according to each user's reserved capacity per unit distance of gas transmission (GJ MDQ/km);

[55] DBP Submission #48

- costs which are incurred directly in the actual transmission of gas (i.e. just compressor fuel) should be allocated according to each User's throughput per unit distance of gas transmission.

358. The cost items and cost allocators proposed by DBP are summarised in the following table.

Cost Allocators Proposed by DBP

Cost Category	Description	Cost Allocator
Capital costs	Return on assets and depreciation	GJ MDQ km
Salaries and wages	Salaries and wages of Operator's (corporate) staff	GJ MDQ km
Asset services	Technical compliance services (for example, safety case preparation) provided by Alinta Network Services ("**ANS**")	GJ MDQ
Administration	Project management and support services provided by ANS	GJ MDQ km
Transportation services	Gas control, SCADA and data management services provided by ANS	GJ MDQ
Land management	Land management, heritage protection and environmental support services provided by ANS	GJ MDQ km
Engineering services	ANS engineering and technical expertise for total system issues including gas measurement, corrosion protection and operating performance improvement	GJ MDQ
Field services (recurrent)	Programmed maintenance of the pipeline itself, compressor stations, and metering facilities, and other maintenance-related activities including logistics, maintenance planning, and maintenance of communications systems and buildings	GJ MDQ km
ANS corporate	Human resource management, legal, finance and accounting, information systems and other commercial services support provided by ANS	GJ MDQ km
OSA fee	Operating Services Agreement management fee payable to ANS	GJ MDQ km
Insurance	All classes of insurance maintained by Operator (other than liquidated damages insurance required under certain transportation contracts, and any construction or expansion works related insurance)	GJ MDQ km

Cost Allocators Proposed by DBP

Equity raising costs	Amortised cost of raising the initial equity for the gas transportation business based on the DBNGP	GJ MDQ km
Asymmetric risk	Allowance for certain risks for which insurance cover cannot or has not been obtained	GJ MDQ km
Liquidated damages insurance	Liquidated damages insurance required by certain existing gas transportation contracts	GJ MDQ km
Regulatory	Operator's costs of complying with regulation of the DBNGP	GJ MDQ
Regulatory review	Operator's estimates of the costs incurred by the Regulator in its conducting approvals processes such as the access arrangement approval process. The estimates are based on the more recent service and standing charges invoiced by the Regulator, and charges levied to cover the costs of the Gas Access Arbitrator	GJ MDQ
Field services (non recurrent)	Major overhauls of items of plant other than compressor units, and other major maintenance activities, which vary from year to year in accordance with manufacturers' specifications and utilization	GJ MDQ km
Fuel gas	Cost of all gas used by Operator in providing a transportation service using the DBNGP, including gas used as compressor fuel, gas used as fuel in gas engine alternators and heaters, gas vented during maintenance activities, and gas lost from the pipeline	GJ (throughput) km

359. To observe the effect of the proposed cost allocation, the Authority has determined Reference Tariffs on the basis proposed by DBP as well as by the distance-based approach described in the Draft Decision (see paragraph 362, below).

360. The Authority has determined all Reference Tariffs on the basis of the tariff path proposed by DBP – this being escalation of tariff charges at 100 per cent of the rate of change in the CPI – and the forecasts of demand for Full Haul, Part Haul and Back Haul Services provided by DBP. The tariff path and escalation of tariffs for inflation is addressed in more detail below in relation to tariff variation and Incentive Mechanisms (paragraph 401 and following).

361. The demand forecasts made by DBP are summarised as follows. The Authority notes that the demand forecast for Full Haul Services differs slightly from that provided by DBP in the Access Arrangement Information due to a correction made by the Authority to remove the forecast (of about one TJ per day contracted capacity and 0.95 TJ/day throughput) for one User in the Mid-West region from the forecast

for the Full Haul Service and include this amount in the forecast for the Part Haul Service.

DBP Forecast of Demand for Services

Year ending 31 December	2005	2006	2007	2008	2009	2010
Full Haul						
Contracted capacity (TJ/day)	593.22	613.22	688.96	743.87	761.11	798.74
Throughput (TJ/day)	571.97	590.65	658.47	712.40	728.97	763.51
Part Haul (forward haul)						
Contracted capacity (TJ/day)	73.88	73.80	73.45	62.70	62.70	62.70
Throughput (TJ/day)	54.57	54.49	54.14	43.89	43.89	43.89
Back Haul						
Contracted capacity (TJ/day)	66.08	109.20	112.20	112.20	112.20	112.20
Throughput (TJ/day)	62.65	109.20	112.20	112.20	112.20	112.20

362. Taking into account the Authority's revision of Total Revenue and DBP's proposed cost allocation, the tariffs determined by the Authority for 2005 are as follows. For the Part Haul and Back Haul Services, a solely distance-based tariff is provided for the purposes of comparison.

Tariffs Determined by the Authority for 2005 with alternative cost allocation methodologies

Service and Charge	Tariffs determined from DBP's proposed cost allocation	Comparative tariffs with proportional distance-based Part Haul and Back Haul tariffs
Full Haul		
Capacity reservation charge ($/GJ MDQ)	0.897314	0.888782
Commodity charge ($/GJ)	0.103098	0.115028
Total at 100% load factor ($/GJ)	1.000412	1.003810
Part Haul		
Capacity reservation charge ($/GJ MDQ/km)	0.000682	0.000635
Commodity charge ($/GJ/km)	0.000106	0.000082
Total at 100% load factor ($/GJ/km)	0.000788	0.000718
Back Haul		
Capacity reservation charge ($/GJ MDQ/km)	0.000751	0.000635
Commodity charge ($/GJ/km)	0.000084	0.000082
Total at 100% load factor ($/GJ/km)	0.000835	0.000718

363. The effects of the change in the cost allocation proposed by DBP are small – the result being a small (0.3 per cent) decrease in the Full Haul Reference Tariff and a

more substantial increase (10 to 16 per cent) in the Part Haul and Back Haul Reference Tariffs.

364. Several parties have made submissions to the Authority expressing objection to DBP's proposed cost allocation for the determination of Reference Tariffs for Part Haul and Back Haul Services.[56] The stated reasons for objection are as follows.

- The determination of tariffs for Part Haul and Back Haul Services by a pro rata distance calculation from the Full Haul Tariff reflects a methodology that has been embraced by the gas industry over time and has advantages of simplicity.
- The cost allocation methodology does not replicate the outcome of a competitive market.
- The cost allocation methodology does not recognise efficiencies across the pipeline system that arise due to the benefits of utilising Part Haul and Back Haul Services to maximise pipeline Capacity and reduce costs of compressor fuel.
- The costs allocated by DBP on the basis of MDQ (rather than distance of gas transportation) are actually related more to the distance of gas transportation to each User's level of MDQ, and, hence, should be allocated on this basis.
- The cost allocation methodology proposed by DBP is contrary to increasing competition between the DBNGP and Parmelia Pipeline because it increases the cost of gas transportation to Mondarra, effectively increasing the cost of gas transportation to the south west of the State by use of the DBNGP and Parmelia Pipelines relative to use solely of the DBNGP. This is contrary to the public interest in having competition in markets and is contrary to the interests of Users and Prospective Users.

365. DBP has made submissions addressing matters raised by some of the above submissions.[57]

366. Section 8.38 of the Code requires that the methodology of cost allocation meet the objectives of section 8.1 of the Code and be otherwise fair and reasonable.

367. Section 8.1(a) of the Code requires that Reference Tariffs provide 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. As the allocation of costs between Reference Services may determine the relative values of Reference Tariffs, but not the overall forecast of revenue to be obtained from all Reference Services, section 8.1(a) is not considered to be relevant in the current consideration of cost allocation.

368. Section 8.1(b) of the Code requires that Reference Tariffs replicate the outcome of a competitive market. Some Users of the DBNGP have submitted that DBP's proposed cost allocation for determination of Reference Tariffs does not replicate the outcome of a competitive market because it results in Reference Tariffs for Part Haul and Back Haul Services that are in excess of Tariffs that would be derived by a pro rata distance-based calculation from the Reference Tariff for Full Haul Services.

[56] Origin Energy, Nickel West (formerly WMC Resources), North West Shelf Gas, Apache Energy, Birla Nifty Pty Ltd, Western Power, Western Power Retail, Australian Pipeline Trust.

[57] DBP Submissions #68, #69, #70.

369. In a competitive market for provision of a service that is characterised by a high proportion of fixed costs of production, the producer of that service would be motivated to charge each customer a price at least equal to the marginal or avoidable cost of service provision, and then charge higher prices to particular customers according to the relative inelasticity of demand for the service by each customer. There is no reason to consider that, if applied to the determination of Reference Tariffs for the DBNGP, this basis for tariff determination would result in a pro rata distance based tariff for Part Haul and Back Haul Services. It is also not possible to conclusively determine that DBP's proposed cost allocation and Reference Tariffs for Part Haul and Back Haul Services are necessarily consistent or inconsistent with those that would be determined in a competitive market for the Services.

370. Section 8.1(c) of the Code requires that Reference Tariffs are determined with a view to ensuring the safe and reliable operation of the pipeline. As the allocation of costs between Reference Services may determine the relative values of Reference Tariffs, but not the overall forecast of revenue to be obtained from all Reference Services, section 8.1(c) is not considered to be relevant in the current consideration of cost allocation.

371. Section 8.1(d) of the Code requires that Reference Tariffs are determined with a view to not distorting investment decisions in pipeline transportation systems or in upstream or downstream industries. Some Users of the DBNGP have submitted that DBP's proposed cost allocation and Reference Tariffs for Part Haul and Back Haul Services would potentially alter decisions to use the Part Haul Reference Service for transport of gas to Mondarra and subsequently to the south west via the Parmelia Pipeline as an alternative to using a Full Haul Service to transport gas to the south west entirely via the DBNGP. That is, the higher Part Haul Reference Tariff that would result from DBP's proposed cost allocation would potentially reduce use of the first of these options for transport of gas to the south west and increase the latter.

372. The Authority notes that for the forthcoming Access Arrangement Period, DBP has forecast that provision of any additional Full Haul Service on the DBNGP will require investment in additional pipeline Capacity. To the extent to which this includes a requirement for investment in expansion of the DBNGP in sections downstream of Mondarra, it is possible that there may be cost savings in transport of additional gas to the south west of Western Australia by transport of gas to Mondarra and subsequently through the Parmelia Pipeline, which has substantial Spare Capacity. The pricing of Part Haul Services in such a way that discourages the transport of gas by a combination of Part Haul Services to Mondarra and use of the Parmelia Pipeline may result in further investment in Capacity of the DBNGP where that additional investment in Capacity is not strictly required. On this basis, the Authority considers that the cost allocation and Reference Tariff for the Part Haul Service proposed by DBP are potentially contrary to the objective of section 8.1(d) of the Code when considered against a pro rata distanced-based tariff derived from the Full Haul Reference Tariff.

373. Section 8.1(e) of the Code refers specifically to the level and structure of Reference tariffs and requires that the level and structure be efficient. To the extent that the levels of Reference Tariffs for multiple Reference Services depend upon the allocation of costs between services, this allocation must itself be consistent with the objective of efficiency.

374. Economic efficiency can be defined as an outcome whereby it is impossible to reallocate resources between uses, or to change production techniques, and/or to trade goods between customers in order to make consumers as a group better off.

375. Economic theory distinguishes between three components of economic efficiency:

- allocative efficiency – which means that the right mix of goods and services is being produced;
- productive efficiency – which means that the mix of goods and services is being produced at lowest cost; and
- dynamic efficiency – which means that the right mix of goods and services continues to be produced for the lowest cost over time.

376. In a market economy, producers and consumers respond to prices. Efficient prices are those that encourage efficient outcomes.

377. In a competitive market, the efficient pricing rule is to set price equal to marginal cost. As customers have to pay the cost that it takes society to produce any good, this rule will make them choose the goods and services they value most highly – allocative efficiency. Similarly, the producers who can produce for the lowest cost get to sell their wares – and so productive efficiency results. The role of competition is to force prices down to marginal cost so that when customers choose the lowest priced item, they are also selecting the lowest cost item for society to produce.

378. In an industry that is characterised by economies of scale and scope (such as gas transmission), setting of prices at marginal cost would leave investors unable to recover their costs (and so fail to attract investment into industry in the future, violating requirements for allocative and dynamic efficiency). The modified efficient pricing rule is that prices should:

- deliver revenue on a per customer basis that is lower than the stand alone cost of providing the service – which is the cost of duplicating the service to that customer, using least cost technology;
- deliver revenue on a per customer basis that is higher than the avoidable cost of providing the service – which is the cost that the service provider could avoid by ceasing to provide service to that customer (note that this is the requirement of section 8.38(a) of the Code); and
- minimise the divergence in consumption of the service from efficient levels – the efficient use of the service would occur if all users paid the marginal cost of usage, hence, where there are fixed costs to be recovered prices should be determined such that there is minimisation of the difference in consumption from a situation where customers were charged only marginal cost.

379. The first two criteria are commonly referred to as the upper and lower bounds for efficient prices.

380. The practical rationale for the upper bound is that if individual customers are charged more than the cost of duplicating their service (using least cost technology), then this might induce them to bypass the system. If this causes costs to be borne that exceed the avoidable cost of serving that customer through the existing system, this would result in society incurring costs that are unnecessary and, therefore, wasteful. As customers as a whole generally bear all of the costs incurred in providing their service, this would increase the total costs they would bear and so increase average prices from what they otherwise would have been.

381. The practical rationale for the lower bound is that if customers pay less than the avoidable cost of providing their service, then:

- the customer might choose to take the service even though they place a value upon it that is lower than the cost to society of providing it; and/or
- the customer might choose to take the service through the existing network, even though there might be cheaper options available to provide the service potential.

382. If customers take a service that they value at less than the cost of provision, then consumer benefit can be increased by diverting those resources to other uses, and if customers choose a higher cost means of providing a service (such as energy supply), then the costs incurred in providing that service to customers is higher, and so prices to customers for that service would be higher on average. In addition, if an individual customer causes more (forward looking) costs to be incurred than they pay for through tariffs (and other charges), then they generate more costs than revenue for the service provider – and so cause tariffs for all other customers to be higher as a result.

383. On the basis of these considerations of efficiency, a price structure should comply with the following broad criteria:

- all customers should pay at least the avoidable cost of the service that they receive; and
- for the last unit of the service, the marginal charge to the customer should be equal or close to the marginal cost of service provision.

384. Setting of prices within these bounds involves or implies an allocation of any costs that are directly attributable to a Service or User to that Service or User, and allocation of the joint or overhead costs of service provision across customers (as required by section 8.38 of the Code). As indicated above, principles of efficiency would dictate that the determination of prices within this range should be such as to minimise the deviation in usage of the service from the level of usage that would occur if all customers paid the marginal cost of usage. As a general proposition, this efficiency objective would be met if the recovery of joint or overhead costs is preferentially from those customers with more inelastic demand for the services over the relevant price range.

385. The cost allocation proposed by DBP attempts to allocate costs according to “rules of thumb” as to the drivers of these costs, these being the MDQ of individual Users, the distance of gas transportation by each User, and the amount of fuel gas attributable to transport of gas for each User. While it may be debatable whether the cost drivers are strictly correct, as indicated in submissions to the Authority on this matter and as acknowledged by DBP, the Authority considers that this cost allocation is consistent with ensuring that all customers should pay at least the avoidable cost of the service that they receive and an approximately even sharing (in proportion to distance of gas transportation) of the fixed costs of the pipeline business. Further, by establishing the Commodity Charge to recover only the cost of fuel gas, the Authority takes the view that this charge establishes the “marginal price” for gas transmission at a value approximately equal to the marginal cost.

386. On this basis, the Authority considers that the cost allocation proposed by DBP is broadly consistent with economic efficiency in the levels of the tariffs for the Full Haul, Part Haul and Back Haul Reference Services. The only possible exception to

this is the levying on Users of the Back Haul Service of a charge for fuel gas. As recognised by DBP in its submission:[58]

> An argument can be made that no fuel is required for the provision of Back Haul and hence no cost should be allocated to it. Indeed, a benefit might be attributed to the provision of Back Haul Service because it may reduce forward haul volumes and the fuel cost incurred in delivering those forward haul volumes. On this argument, the maximum cost of fuel gas which might be allocated to Back Haul Service is zero.

387. DBP argues, however, that:[59]

> While such a strictly incremental approach can be applied in the allocation of fuel gas costs, Operator doubts that the same approach can be applied consistently to the allocation of other non capital costs between full haul, Part haul and Back Haul Services.
>
> Operator has, therefore, formed the view that the operating pipeline is a single common facility which is used to provide full haul, Part Haul and Back Haul Services. The costs of this common facility are then to be allocated between Services and, in the case of fuel gas costs, distance-related cost allocation ensures a reasonable attribution of cost to Service provision. In addition to an efficiency aspect – shippers paying only for the facilities used to provide them with service – the resulting tariffs also have an equity aspect. Each unit of service, irrespective of whether it is full haul, Part Haul or Back Haul, is treated as incurring a proportion of the total cost of the common facility.

388. The Authority concurs with DBP's submission that while the cost of fuel gas may be reasonably unambiguously allocated to Users on the basis of the quantity and distance of gas transport, other costs that may also be in the nature of incremental costs of gas transmission are not as readily allocated. Further, the Authority notes that under the tariff structure proposed by DBP, the removal of a fuel gas component from the tariff for the Back Haul Service would result in the Commodity Charge for this Service being set at zero. This is contrary to a reasonable view that there might be at least some element of incremental cost involved in providing a Back Haul Service, even though this cost may not be readily identified and quantified. For these reasons, the Authority is not concerned about the in-principle efficiency issues that arise in assigning part of the cost of fuel gas to Users of the Back Haul Service.

389. In addition to meeting the objectives of section 8.1 of the Code, the cost allocation underlying determination of Reference Tariffs is also required under section 8.38 of the Code to be fair and reasonable.

390. Several Users of the DBNGP have submitted that the allocation of additional costs to Part Haul and Back Haul Services is unreasonable for reason that it is inconsistent with the past practice of determining tariffs for Part Haul Services (by a pro rata distance-based calculation from Full Haul Tariff) under the *Dampier to Bunbury Pipeline Regulations 1998* and under contracts for gas transmission services entered into by some Users in 2004.

391. The Authority notes that DBP has indicated that there is unlikely to be any sale of the Full Haul Reference Service during the forthcoming Access Arrangement Period due to the lack of Spare Capacity. The Authority understands, however, that there may be Spare Capacity available for provision of Part Haul and Back Haul Reference Services. By proposing a re-allocation of costs to the Part Haul and Back Haul Services and an increase in the Reference Tariffs for these Services relative to the

[58] DBP's Public version of Confidential Submission #48

[59] DBP's Public version of Confidential Submission #48

Full Haul Reference Tariff, DBP is re-weighting tariffs towards the Services for which it is most likely to out-perform its demand forecasts, and this is able to be undertaken at no expected cost to DBP in the absence of any sales of the Full Haul Reference Service. The Authority considers this approach to be unreasonable in the context of the departure from precedent in the setting of Part Haul and Back Haul Tariffs and the absence of any other cost or efficiency reason for the change in the methodology for determination of Part Haul and Back Haul Reference Tariffs.

392. Taking into account the potential conflict of DBP's proposed cost allocation and determination of Part Haul and Back Haul Reference Tariffs with the objective of section 8.1(d) of the Code and the unreasonableness of the departure from precedent in the methodology used to determine Part Haul and Back Haul Tariffs, the Authority considers that the cost allocation proposed by DBP does not meet the requirements of section 8.38 of the Code. Accordingly, the Authority takes the view that the Reference Tariffs for Part Haul and Back Haul Services should be determined by a pro rata distance-based calculation from Full Haul Tariff as applied by the Authority for the purposes of its Draft Decision. The tariffs determined by this approach are as follows.

Tariffs Determined by the Authority for 2005 with Reference Tariffs for Part Haul and Back Haul Services determined by a pro rata distance-based calculation from Full Haul Tariff

Service and Charge	Tariff Charges Determined by the Authority
Full Haul	
Capacity reservation charge ($/GJ MDQ)	0.888782
Commodity charge ($/GJ)	0.115028
Total at 100% load factor ($/GJ)	1.003810
Part Haul and Back Haul	
Capacity reservation charge ($/GJ MDQ/km)	0.000635
Commodity charge ($/GJ/km)	0.000082
Total at 100% load factor ($/GJ/km)	0.000718

393. Taking into account the Total Revenue determined by the Authority and the above matters in relation to cost allocation, the Authority requires the following amendments to the Access Arrangement.

Final Decision Amendment 7

The Proposed Access Arrangement should be amended to include a Reference Tariff for the Reference Service that is of the nature of the "T1 Service" on the terms and conditions set out in Appendix 1 of this Final Decision. This Reference Tariff should comprise a Capacity Reservation Charge and a Commodity Charge as follows for the calendar year 2005:

Capacity Reservation Charge: $0.888782/GJ MDQ

Commodity Charge: $0.115028/GJ

For the years 2006 to 2011, values of the Capacity Reservation Tariff and Commodity Tariff should be determined in accordance with clause 7.11 of the Proposed Access Arrangement.

The Reference Tariff should reflect the following cost parameters (in dollar values of 1 January 2005).

Capital Base (at 31 December 2004)	$1,619.60 million					
New Facilities Investment	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
	13.33	78.94	373.28	319.84	90.50	151.25
Rate of Return	7.24% real pre-tax					
Depreciation	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
	44.19	44.52	47.03	54.62	60.07	61.49
Non Capital Costs	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
	59.45	57.22	77.46	76.31	73.87	74.57

Final Decision Amendment 8

The Proposed Access Arrangement should be amended to include a Reference Tariff for Part Haul and Back Haul Services. The charges of this Reference Tariff should be determined as a proportion of the charges of Reference Tariff for the Full Haul Reference Service as follows:

$$F \times \frac{D}{1399}$$

where

F is the value of the charge that would apply if the Service were the full haul Reference Service

D is the distance in kilometres of pipeline between the relevant Receipt Point and the relevant Delivery Point.

Rebatable Services

394. DBP's Proposed Access Arrangement does not include provision for allocation of costs to Services other than the Full Haul Reference Service and to Part Haul Services. Nor has DBP proposed that any Non-Reference Services be Rebatable Services within the meaning of section 8.40 of the Code.

395. Submissions from Users of the DBNGP[60] have expressed concern that provisions of the Current Access Arrangement for Rebatable Services have not been carried over into the Proposed Access Arrangement.

396. Under clause 9 of the Current Access Arrangement, revenue from three Non-Reference Services (Seasonal Service, Park and Loan Service and Secondary Market Service), as well as any other Service nominated by the Service Provider, comprises Rebatable Revenue. Under a complex formula, an amount of Rebatable Revenue is determined which is distributed between the Service Provider and "Rebate Sharing Shippers" in proportions of 55 per cent and 45 per cent, respectively.

397. Under section 8.40 of the Code, provision is made for Rebatable Services as a means of avoiding a need to allocate Total Revenue across all Services that may be offered by use of a pipeline. Rather than having to allocate costs on the basis of forecast demand for Services, section 8.40 provides for there to be no allocation of Revenue to some Services, subject to a share of any revenue from sale of these Services being rebated to Users of other Services. Under the definition of a Rebatable Service in section 10.8 of the Code, such an arrangement is contemplated for Services for which:

(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.

[60] CSBP, Western Power.

398. Section 8.40 also indicates that a rebate mechanism should be determined having regard to two objectives:

(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.

399. The Authority has considered the question of whether some of the Non-Reference Services described in the Services Policy should be Rebatable Services within the context of the current circumstances of the DBNGP. The Authority notes that, in the current and foreseeable circumstances of there being capacity constraints on the provision of Services by the DBNGP, there is potentially a substantial benefit to Users and a substantial public benefit in DBP having a strong incentive to offer Services that facilitate the efficient utilisation of Capacity. Such Services would include the Spot Capacity Service, Park and Loan Service and Seasonal Service that seek to utilise Capacity that would otherwise not be available to provide a firm service. The Authority also notes that, as result of there being capacity constraints on the provision of Services by the DBNGP, there is unlikely to be sufficient ability for DBP to provide these Services to an extent that DBP could substantially over-recover costs of pipeline operation.

400. For these reasons, the Authority does not consider the absence of provisions for rebate of revenues from Non Reference Services to be contrary to the objectives of section 8.1 of the Code for a Reference Tariff and Reference Tariff Policy.

Reference Tariff Variation

401. The Code provides for variation in Reference Tariffs within an Access Arrangement Period in two ways:

- variation in Reference Tariffs according to principles such as a predetermined price path or realised cost and sales outcomes for the Service Provider; and
- implementation of an Approved Reference Tariff Variation Method.

402. Provisions of the Code relevant to variation in Reference Tariffs within an Access Arrangement Period are set out below.

403. Section 8.3 of the Code provides for the Service Provider to have discretion as to the manner in which Reference Tariffs 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.

404. 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.

405. 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.

406. Under clause 7.11 of the Proposed Access Arrangement, the Reference Tariff Policy provides for the Reference Tariff to be varied within the Access Arrangement Period only by escalation at 100 per cent of the rate of change in the CPI.

407. Submissions have been received from Users[61] contending that the Reference Tariff should only be escalated at 67 per cent of the rate of change in the CPI, consistent with provisions of the Current Access Arrangement.

408. The calculation used by DBP for determination of the Reference Tariff, and as used by the Authority in re-determining Reference Tariffs for the purposes of this Final Decision, derives a value for the Reference Tariff in 2005 on the basis that this tariff

[61] Western Power, Newmont Australia Ltd.

will be held constant in real terms over the Access Arrangement Period. In this manner, the Reference Tariff is determined consistently with returning the present value of Total Revenue over the Access Arrangement Period, given forecasts of demand for Services. A change in the tariff path, say to escalation at 67 per cent of the rate of change in the CPI, would have the effect of altering the value of the Reference Tariff in 2005 and each subsequent year of the Access Arrangement Period, but not the present value of Total Revenue that is forecast to be recovered.

409. The Authority is therefore of the view that a debate about the relative merits of different tariff escalation rates over the Access Arrangement Period should focus on the merits of the particular tariff paths rather than the escalation rate *per se*. For example, consideration could be given to tariff paths ("glide paths") that would see the Reference Tariff in the final year of the Access Arrangement Period being of approximately the same magnitude as expected for the first year of the next Access Arrangement Period, with the advantage of avoiding a significant change in the tariff.

410. For the proposed Access Arrangement Period of 2005 to 2010, the Authority notes that large increases in demand are forecast with associated large values of New Facilities Investment. As the Reference Tariff that will be determined for the first year of the next Access Arrangement Period (starting in 2011) will be highly dependent upon the extent of the changes in demand and level of new investment, the Authority does not consider that it is necessary at this time to be concerned with manipulating the tariff path for the proposed Access Arrangement Period with a view to the value of the Reference Tariff in the next period. The Authority therefore considers the tariff path proposed by DBP for the Reference Tariff to be consistent with the objectives contained in section 8.1 of the Code.

Incentive Mechanisms

411. The Code provides for the Reference Tariff Policy of an Access Arrangement to include an Incentive Mechanism.

412. Sections 8.44 to 8.46 of the Code set out the principles for establishing an Incentive Mechanism within the Reference Tariff Policy and the objectives that the Incentive Mechanism should seek to meet.

413. Section 8.44 of the Code states that a Reference Tariff Policy should, wherever the Relevant Regulator considers appropriate, contain a mechanism that permits the Service Provider to retain all, or a share, of any returns to the Service Provider from the sale of a Reference Service during an Access Arrangement Period that exceeds the level of returns expected at the beginning of the Access Arrangement Period (an "**Incentive Mechanism**"), particularly where the additional returns are attributable (at least in part) to the efforts of the Service Provider. Such additional returns may result from, amongst other things, lower Non Capital Costs or greater sales of Services than forecast.

414. Section 8.45 of the Code provides that 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.

415. Section 8.46 of the Code states that 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).

416. As an element of a Reference Tariff Policy, an Incentive Mechanism is also required to meet the objectives of section 8.1 of the Code.

417. Under clauses 7.11 and 7.12 of the Proposed Access Arrangement, the Reference Tariff Policy includes two elements of an Incentive Mechanism:

- the price path approach to the specification of the Reference Tariff; and
- a mechanism whereby a share of any reductions in Non Capital Costs during the Access Arrangement Period, relative to forecast Non Capital Costs, is "carried over" to the Access Arrangement Period commencing on 1 January 2011 (an "efficiency carryover mechanism").

418. The Authority is required to consider whether these Incentive Mechanisms proposed by DBP are consistent with the objectives of section 8.46 of the Code.

419. Under the price path specification of the Reference Tariff, the Service Provider is faced with an incentive to out-perform the forecasts of costs and demand on which the determination of Reference Tariffs is based. This incentive arises from Service Provider capturing the benefits of this out-performance until the end of the Access Arrangement Period, at which time the Reference Tariff is re-set on the basis of costs and demand.

420. The specification of a tariff path for the Access Arrangement Period is consistent with the specification of Reference Tariffs in many Access Arrangements approved under the Code to date. The Authority accepts that a tariff path as an element of an Incentive Mechanism is consistent with the objectives of section 8.46 of the Code

inasmuch as it creates incentives for development of the market for Services generally and for minimisation of costs.

421. The second Incentive Mechanism included in the Proposed Access Arrangement is the efficiency carryover mechanism. This is set out in clause 7.12 of the Proposed Access Arrangement.

422. The efficiency carryover mechanism proposed by DBP extends the incentive properties of the price path form of price control, in terms of incentives to reduce Non Capital Costs below the levels of forecasts used in the determination of Reference Tariffs. Under a purely price path Incentive Mechanism, the Service Provider retains benefits during the Access Arrangement Period from any cost savings that are able to be made relative to forecasts. The Service Provider does not, however, retain benefits beyond the Access Arrangement Period as the Reference Tariff is re-set on the basis of forecasts of costs, which supposedly incorporate the cost reductions achieved in the previous period.

423. A problem with reliance on a price path form of price control as an Incentive Mechanism to motivate reductions in costs is that, as the Service Provider only retains the benefits of the cost reduction for the remainder of the Access Arrangement Period, the strength of the incentive to reduce costs declines through the Access Arrangement Period. Cost reductions achieved in the first year of the period would produce five years of benefits for the Service Provider, while cost reductions achieved in the second year would produce four years of benefits, and so on. This may even create perverse incentives for a Service Provider to defer initiatives for cost reductions from the last year of an Access Arrangement Period to the first year of the next or, even worse, to engineer higher levels of costs towards the end of an Access Arrangement Period.

424. An efficiency carryover mechanism in the nature of that proposed by DBP counters these perverse incentives by allowing the Service Provider to carry over benefits gained from cost reductions from one regulatory period to the next so that the Service Provider is able to retain the benefits of a cost reduction for a pre-determined period from the time that the cost reduction is achieved, regardless of the timing relative to the end of the Access Arrangement Period.

425. There is substantial regulatory precedent for inclusion of efficiency carryover mechanisms in Access Arrangements under the Code, including, for example, Access Arrangements for the Victorian gas distribution networks,[62] the Victorian principal transmission system (GasNet)[63] and AGL Gas Networks in New South Wales.[64] A similar efficiency carryover mechanism is also applied to the Victorian electricity distribution networks.

426. While the efficiency carryover mechanism proposed by DBP is broadly similar to the mechanisms in place for other gas pipelines, it has two distinguishing characteristics as follows.

[62] Essential Services Commission, 'Review of Gas Access Arrangements', Final Decision, October 2002.

[63] Australian Competition and Consumer Commission, 'Gasnet Australia Access Arrangements Revision for Principal Transmission Systems', Final Decision, November, 2002.

[64] Independent Pricing and Regulatory Tribunal, December 2004, Revised Access Arrangements for AGL Gas Networks (AGLGN): Draft Decision.

427. Firstly, the mechanism proposed by DBP is "symmetrical" in that both cost reductions and cost increases relative to forecasts are carried forward. DBP stands to benefit from the carry over of cost reductions (that result in an increase in the value of Total Revenue in the next Access Arrangement Period), but bears a risk of a "negative efficiency carryover" from the carry over of cost increases (that result in a reduction in the value of Total Revenue in the next Access Arrangement Period). Efficiency carryover mechanisms implemented elsewhere have generally not provided for negative efficiency carryovers, although in some instances the regulators in the relevant jurisdictions have reserved an ability to review this arrangement in the future.[65]

428. The Authority considers that the symmetry in the efficiency mechanism carryover mechanism, while contrary to regulatory precedent, creates incentives for improvements in efficiency by DBP and has the effect of partially sheltering Users from decreases in efficiency. For this reason, the Authority is satisfied that this aspect of the proposed efficiency carryover mechanism is consistent with the objective of section 8.36(b) of the Code.

429. Secondly, the efficiency carryover mechanism proposed by DBP provides for the benefits of cost reductions relative to forecasts (and costs of increases relative to forecasts) to be carried forward for 10 years. Two consequences of this are:

- Users would not benefit from cost reductions (or would not suffer from cost increases) for a period of 10 years from the time that the cost decrease or increase occurs; and

- in present value terms, the benefits of cost reductions (or costs of cost increases) are shared between DBP and Users in a ratio of approximately 50:50.

430. The 10 year period of carryover is contrary to general precedent for gas pipelines and electricity distribution systems elsewhere, which is for a carry forward period of only five years, implying a sharing of benefits, in present value terms, between the Service Provider and customers in a ratio of approximately 30:70. DBP indicates that the 10 year carryover period is not unreasonable in circumstances of a major pipeline expansion and consequent difficulty in forecasting Non capital Costs

431. The sharing of benefits of efficiency gains between the Service Provider and Users is implicit in the required objectives for an Incentive Mechanism under section 8.46 of the Code. The Code does not, however, provide clear guidance as to what the appropriate division of benefits should be.

432. The Authority recognises that the sharing of benefits of efficiency gains within an efficiency carryover mechanism represents a trade-off between:

[65] For example, the Essential Services Commission in its Final Decision on proposed revisions to the Access Arrangements for the Victorian gas distribution networks stated that it may" exercise discretion in determining the appropriate treatment of any negative carryover amount, having regard to the specific circumstances in which the negative amount has arisen" (Essential Services Commission, 'Review of Gas Access Arrangements', Final Decision, October 2002, page 165). A similar stance was also taken by the Essential Services Commission of South Australia in regard to regulation of electricity distribution networks (Essential Services Commission of South Australia, 2003, Electricity Distribution Price Review: Efficiency Carryover Mechanism, Working Conclusions).

- providing incentives for the Service Provider to reduce costs and increase technical efficiency, consistent with the objective of section 8.46(b) of the Code; and

- ensuring that Users benefit from cost reductions and that prices are adjusted to reflect costs so as to increase allocative efficiency, consistent with the objective of section 8.46(e) of the Code.

433. The Authority recognises that determining the trade-off between these two objectives is largely a matter of judgement. In considering this matter, the Authority has taken into account the analysis of the trade-off undertaken by the Victorian Office of the Regulator General (now the Essential Services Commission) in its 2001 to 2005 price determination for the Victorian electricity distribution systems.[66] Under reasonable assumptions of diminishing efficiency gains with increasing efficiency incentives, the Regulator General determined that an optimal sharing of benefits – that created an incentive for efficiency gain consistent with producing the greatest consumer benefit – would allow the Service Provider to retain less than 50 per cent of the benefits.

434. The Authority is also concerned that a 10 year carryover period gives rise to a substantial delay in Users gaining benefits from cost reductions achieved by DBP, and that such a sustained delay is inconsistent with the objective of section 8.1(b) of the Code that the Reference Tariff and Reference Tariff Policy should be designed to replicate the outcomes of a competitive market, even if this objective is interpreted in the sense of a workably competitive market.

435. In view of these matters, the Authority took the view in its Draft Decision that a five year, rather than 10 year, carryover period in an efficiency carryover mechanism is necessary to satisfy the objectives of sections 8.1 and 8.46 of the Code. The following amendment was required under the Draft Decision.

> Clause 7.12(c) of the Proposed Access Arrangement should be amended so that the share of returns to DBP is calculated as follows.
>
> | **Year** | **Share of returns** |
> |---|---|
> | 2011 | $S_{2011} = E_{2006} + E_{2007} + E_{2008} + E_{2009}$ |
> | 2012 | $S_{2012} = E_{2007} + E_{2008} + E_{2009}$ |
> | 2013 | $S_{2013} = E_{2008} + E_{2009}$ |
> | 2014 | $S_{2014} = E_{2009}$ |
> | 2015 | $S_{2015} = 0$ |
>
> (Draft Decision Amendment 10)

436. Subsequent to the Draft Decision, DBP has made a submission to the Authority that Amendment 10 of the Draft Decision should not be imposed on DBP for reasons that:

- an efficiency carryover period of 10 years is not unreasonable as the benefits of efficiency gains (and resultant competitive advantage) may be retained by firms for extended periods, even in highly competitive industries, and this particularly applies to efficiency gains that are achieved through “fine tuning” of organisation arrangements and work methods; which are the nature of efficiency gains likely to be achievable by DBP; and

[66] Office of the Regulator General, September 2000, Electricity Distribution Price Determination, Volume 1 pp 90 – 94.

- an efficiency carryover period of five years provides inadequate incentive for DBP to incur the costs of achieving efficiency gains, including non-pecuniary costs.[67]

437. DBP further submits that if the Authority maintains the requirement for amendment of the efficiency carryover mechanism to reduce the period of the mechanism to five years, then DBP would seek to remove the "symmetry" of the mechanism that would see DBP bearing a risk of carryover of operating cost forecasts being exceeded.[68]

438. The Authority has noted the submission from DBP, but is unconvinced that the efficiency carryover period of five years provides inadequate compensation to DBP for costs incurred in achieving efficiency gains, and is therefore unconvinced that it is contrary to the objectives for Reference Tariffs as set out in section 8.1 of the Code. Further, the Authority maintains the view that, in the absence of any demonstration that longer carryover periods are necessary to provide incentives for efficiency gains, an efficiency carryover period of five years provides an appropriate balance of interests between DBP and Users and Prospective Users of the DBNGP, taking into account the factors in section 2.24 of the Code. For these reasons, the Authority maintains the view that the efficiency carryover period should be limited to five years.

Final Decision Amendment 9

Clause 7.12(c) of the Proposed Access Arrangement should be amended so that the share of returns to DBP is calculated as follows.

Year	**Share of returns**
2011	$S_{2011} = E_{2006} + E_{2007} + E_{2008} + E_{2009}$
2012	$S_{2012} = E_{2007} + E_{2008} + E_{2009}$
2013	$S_{2013} = E_{2008} + E_{2009}$
2014	$S_{2014} = E_{2009}$
2015	$S_{2015} = 0$

439. The Authority has noted DBP's submission that, if the Authority maintains the requirement for amendment of the efficiency carryover mechanism to reduce the period of the mechanism to five years, then DBP would wish to remove the "symmetry" of the mechanism that would see DBP bearing a risk of carryover of operating cost forecasts being exceeded.

440. The Authority recognises the risk that such symmetry would create for DBP and the Authority does not consider that this risk is a desirable feature of an efficiency mechanism, nor necessary as an incentive to make efficiency gains in the provision of Services. As such, the Authority considers that the removal of this symmetry from the efficiency carryover mechanism would be consistent with the Authority's reasons for requiring Amendment 9 of this Final Decision.

Fixed Principles

441. Section 8.47 of the Code provides for certain principles of the Reference Tariff Policy to be Fixed Principles, meaning that the principles cannot be changed without the agreement of the Service Provider during a specified period (Fixed Period) which may extend beyond the term of the Access Arrangement Period.

[67] DBP Confidential Submission #37

[68] DBP Confidential Submission #37

442. Section 8.48 of the Code provides that a Fixed Principle may include any Structural Element, which is defined in section 10 of the Code as:

> 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.

443. This definition of a Structural Element indicates that a Market Variable Element can not be a Fixed Principle. Market Variable Element is defined in section 10 of the Code as:

> 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.

444. Under clauses 7.6 and 7.13 of the Proposed Access Arrangement, DBP proposes the following fixed principles:

- the methodology of determining the Capital Base as set out in section 7.3 of the Proposed Access Arrangement (paragraph 7.13(a)(i) of the Proposed Access Arrangement);
- the method of determination of the Rate of Return as set out in sections 7.5 and 7.6 of the Proposed Access Arrangement (being the CAPM and an estimate of the cost of debt), and the following values of parameters of the CAPM –
  - market risk premium of 6.00 per cent,
  - asset beta of 0.60,
  - debt beta of 0.20,
  - ratio of debt to total assets of 60 per cent and
  - value of imputation credits of 50 per cent (clause 7.6 and paragraph 7.13(a)(ii) of the Proposed Access Arrangement); and
- a requirement that the Authority (or other Relevant Regulator under the Code) not take into account, in determination of a Reference Tariff after 2011 or in any other functions, the amount by which the revenue earned by DBP in the sale of Services exceeds the revenue that might have been earned had all full haul Services been sold at the Reference Tariff plus revenue from sale of other Services (paragraph 7.13(a)(iii) of the Proposed Access Arrangement).

445. DBP has proposed a Fixed Period extending to 2031.

446. In considering the Fixed Principles proposed by DBP, the Authority is required to determine whether the proposed Fixed Principles are Structural Elements, and to consider the interests of the Service Provider and the interests of Users and Prospective Users.

447. The methodology for determination of the Capital Base is set out in clause 7.3 of the Proposed Access Arrangement. The Authority notes that the methodology is a roll-forward calculation as contemplated by section 8.9 of the Code. In the context of the proposed Access Arrangement Period for 2005 to 2010, the methodology does not recognise that the value of the Capital Base calculated for each year, and for the purposes of determining the Reference Tariff, is a notional value based on a *forecast* of New Facilities Investment that is expected to meet the requirements of section 8.16 of the Code. The value of the Capital Base calculated at the commencement of the next Access Arrangement Period would be determined on the basis of *actual* New Facilities Investment that meets the requirements of section 8.16 of the Code, and this value may differ from that determined for the purposes of calculation of a Reference Tariff.

448. In its Draft Decision, the Authority took the view that establishing the methodology for determination of the Capital Base as a Fixed Principle meets the definition of a Structural Element and is not contrary to the interests of Users and Prospective Users, but that this methodology should distinguish between the *ex ante* determination of the Capital Base for the purposes of determining the Reference Tariff and the *ex post* determination of the Capital Base at the commencement of the next Access Arrangement Period. The following amendment was required under the Draft Decision.

> Clause 7.3 of the Proposed Access Arrangement should be amended so as to distinguish between the *ex ante* determination of the Capital Base for the purposes of determining the Reference Tariff (involving consideration of forecast New Facilities Investment considered likely to meet the requirements of section 8.16 of the Code) and the *ex post* determination of the Capital Base at the commencement of the next Access Arrangement Period (involving consideration of actual New Facilities Investment that meets the requirements of section 8.16 of the Code). (Draft Decision Amendment 11)

449. Subsequent to the Draft Decision, DBP has indicated in a submission to the Authority a proposal to revise clause 1.3 of the Proposed Access Arrangement to read as follows.[69]

> 7.3 Calculation of Capital Base
>
> (i) The Initial Capital Base at 1 January 2000 was $1,550.00 million.
>
> (ii) For each year after 2000, and until 1 January 2005, the Capital Base for the DBNGP at the beginning of the year was:
>
> (A) the Capital Base at the beginning of the immediately preceding year; plus
>
> (B) actual New Facilities Investment during the preceding year; less
>
> (C) depreciation for the preceding year.
>
> (iii) The calculation of the Capital Base was undertaken in real terms with all values expressed at 31 December 2004 prices.
>
> (iv) The Reference Tariff for the Access Arrangement Period is determined on the basis of New Facilities Investment that is forecast to occur within the Access Arrangement Period.

[69] DBP Submission #27.

450. The Authority does not consider that the revisions proposed by DBP adequately address the requirements of Amendment 11 of the Draft Decision. In particular, the Authority is of the view that the provisions of clause 7.3 of the Proposed Access Arrangement for inclusion of New Facilities Investment in the Capital Base should make specific reference to the relevant tests of sections 8.16 and 8.20 of the Code.

451. Furthermore, given the interpretation of the Code that has been applied by DBP to determining the value of Depreciation in rolling forward the Capital Base for the purposes of the Proposed Access Arrangement (paragraph 178 and following of this Final Decision), the Authority considers that clause 7.3 of the Proposed Access Arrangement should explicitly indicate that the value of Depreciation applied in the roll forward of the Capital Base over a preceding Access Arrangement Period is the value applied in the determination of Reference Tariffs for that Access Arrangement Period.

Final Decision Amendment 10 Clause 7.3 of the Proposed Access Arrangement should be amended so as to distinguish between the *ex ante* determination of the Capital Base for the purposes of determining the Reference Tariff (involving consideration of forecast New Facilities Investment considered likely to meet the requirements of section 8.16 of the Code) and the *ex post* determination of the Capital Base at the commencement of the next Access Arrangement Period (involving consideration of actual New Facilities Investment that meets the requirements of section 8.16 of the Code). Clause 7.3 should also be amended to indicate that the values of Depreciation applied in determination of the Capital Base for each year after 2000, and until 1 January 2005, are the values of Depreciation applied in the determination of Reference Tariffs for the period 2000 to 2005.

452. In regard to the method of determination of the Rate of Return and values of parameters of the CAPM, the Code explicitly contemplates use of the CAPM for determining the Rate of Return. Further, the definition of a Structural Element under the Code explicitly includes the assumed financial structure for the regulated entity (the assumed level of gearing) and the part of the Rate of Return that could be earned on an asset that does not bear any market risk. Both the methodology used by DBP in determining the Rate of Return, and the CAPM parameters proposed by DBP as Fixed Principles would appear to fall within the definition of Structural Elements.

453. In assessing whether the methodology used by DBP in determining the Rate of Return and the CAPM parameters proposed by DBP may be Fixed Principles, the Authority has considered the interests of DBP and of Users and Prospective Users.

454. In its Draft Decision, the Authority acknowledged the certainty that the proposed Fixed Principles would provide to DBP in respect of future Access Arrangement Periods, but took the view that DBP's proposed Fixed Principles relating to the Rate of Return may, at this time, be unreasonably contrary to the interests of Users and Prospective Users. The Authority took the view that the Rate of Return values approved by regulators under the Code (and under other similar regulatory regimes for other infrastructure services) are currently a matter of substantial debate, generally focussed on levels of risk of regulated entities (as reflected in beta values) and effects of regulatory Rate of Return determinations on investment in pipelines. It is possible that future consideration of methodologies for determining Rates of Return will allow a refinement of regulatory practice. The Fixed Principles proposed by DBP in relation to the Rate of Return would unreasonably prevent Users and

Prospective Users from receiving any benefits that may arise from such refinements. The following amendment was required under the Draft Decision.

> The Proposed Access Arrangement should be amended so as to delete sub-clauses 7.6(d) and paragraph 7.13(a)(ii), both relating to the establishment of the methodology for determination of the Rate of Return, and some parameter values in the determination, as Fixed Principles. (Draft Decision Amendment 12)

455. Subsequent to the Draft Decision, DBP has indicated in submissions to the Authority that the requirement for Amendment 12 of the Draft Decision is unreasonable for reasons that:[70]

- the methods and capital asset pricing model parameters that are the subject of the proposed Fixed Principles meet the primary test of the Code for their being Fixed Principles, which is meeting the definition of Structural Elements;
- the Authority's requirement to remove these Fixed Principles are not adequately supported by the consideration that there may be a refinement of regulatory practice that leads to lower rates of return; and
- the Authority has not taken into account that the proposed Fixed Principles protect both DBP (from a decline in the Rate of Return) and Users (from an increase in the Rate of Return).

456. The Authority maintains the view as expressed in its Draft Decision that the methods and capital asset pricing model parameters that are the subject of the proposed Fixed Principle fall within the definition of Structural Elements under section 10.8 of the Code and therefore *may* be Fixed Principles under section 8.48 of the Code. However, under section 8.48 of the Code, 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". The Authority maintains the view that given that there is substantial debate about rates of return in utility regulation, which DBP acknowledges in its submission, that the Fixed Principles proposed by DBP in clause 7.6(d) and paragraph 7.13(a)(ii) of the Proposed Access Arrangement are unreasonably contrary to the interests of Users and Prospective Users. Also in this regard, the Authority notes that a Fixed Principle is "fixed" only to the extent that it is not able to be changed by a regulator without the agreement of the Service Provider. As such, and contrary to DBP's submission, the Fixed Principles proposed by DBP do not offer protection to Users against the risk of increases in the Rate of Return in future revisions of the Access Arrangement.

> Final Decision Amendment 11
>
> The Proposed Access Arrangement should be amended so as to delete sub-clauses 7.6(d) and paragraph 7.13(a)(ii), both relating to the establishment of the methodology for determination of the Rate of Return, and some parameter values in the determination, as Fixed Principles.

457. The third of the Fixed Principles proposed by DBP acts to prevent the Authority taking into account in a future determination any difference between revenues actually earned and revenues that might otherwise have been earned if Full Haul

[70] DBP Submission #27.

Services were sold at the Reference Tariff. This Fixed Principle appears to be consistent with provisions of the Code including:

- section 2.47, which prevents the Authority from approving revisions to an Access Arrangement (or drafting and approving its own revisions to an Access Arrangement) if a provision of the Access Arrangement as revised would, if applied, deprive any person of a contractual right in existence prior to the date the revisions to the Access Arrangement were submitted (or were required to be submitted), other than an Exclusivity Right which arose on or after 30 March 1995; and

- section 2.50, which indicates that nothing in an Access Arrangement except for the Queuing Policy limits the terms and conditions (including tariffs) that can be agreed between a Service Provider and a User or Prospective User.

458. In its Draft Decision, the Authority indicated that it is satisfied that the Fixed Principle proposed under paragraph 7.13(a)(iii) of the Proposed Access Arrangement is consistent with the definition of a Structural Element and is not unreasonably contrary to the interests of Users or Prospective Users. The Authority maintains this view.

Terms and Conditions

Requirements of the Code

459. 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.

Proposed Revisions to the Access Arrangement

460. DBP has provided terms and conditions for the single proposed Reference Service (the Tf Service) as Annexure A of the Proposed Access Arrangement: the Access Contract Terms and Conditions.

Terms and Conditions for Reference Services

Draft Decision

461. The Authority indicated in its Draft Decision (and maintains in this Final Decision) that the Proposed Access Arrangement should be amended to remove the Tf Service and to include three other Services as Reference Services:

- a T1 Service in the nature of the "T1 Service" to which the Standard Shipper Contract relates;

- a Part Haul Service that is in the nature of the T1 Service to which the Standard Shipper Contract relates; and

- a Back Haul Service that is in the nature of the T1 Service to which the Standard Shipper Contract relates.

462. Given the requirement for the Proposed Access Arrangement to be amended to remove the Tf Service, the Authority did not undertake an assessment of the terms and conditions of this service as proposed by DBP. Rather, the Authority gave consideration to the nature of terms and conditions that should apply to the three Reference Services that are required under this Final Decision to be included in the Access Arrangement.

463. The Authority indicated in its Draft Decision that a mutual willingness of both Users and DBP to enter into contracts under terms as set out in, or substantially based on, the Standard Shipper Contract indicates both that a Service of the nature provided under the Standard Shipper Contract is likely to be sought by a significant part of the market and that DBP is willing and able to provide such a Service.

464. The Authority also noted in its Draft Decision that a number of parties made submissions to the Authority requesting that the T1 Service be included in the Access Arrangement. Those parties did not make any general claim that the terms and conditions set out in the Standard Shipper Contract are unreasonable, except in relation to gas quality. On this basis, the Authority indicated in its Draft Decision that, with the exception of terms and conditions relating to gas quality (addressed further below), the terms and conditions for the T1 Service as set out in the Standard Shipper Contract appear, prima facie, to be reasonable within the meaning of section 3.6 of the Code. The Authority consequently took the view in its Draft Decision that the Access Arrangement should include terms and conditions for the T1 Service, Part Haul Service and Back Haul Service (all as Reference Services) that are substantially the same as the terms and conditions set out in the Standard Shipper Contract, with the exception of the terms and conditions that relate to a gas quality specification (for reasons as set out below).

> The Proposed Access Arrangement should be amended to include terms and conditions for the T1 Service (as a Reference Service) that are substantially the same as the terms and conditions set out in the Standard Shipper Contract, save as otherwise required by this Draft Decision. (Draft Decision Amendment 13)
>
> The Proposed Access Arrangement should be amended to include terms and conditions for the Part Haul Service and Back Haul Service (as Reference Services) that, to the extent applicable for these Services, are substantially the same as the terms and conditions set out in the Standard Shipper Contract, save as otherwise required by this Draft Decision. (Draft Decision Amendment 14)

Submissions on the Draft Decision

465. Some Users of the DBNGP and gas producers have made submissions to the Authority in support of the Authority's determination under the Draft Decision to require terms and conditions to be established for the T1 Service, Part Haul Service and Back Haul Service (as Reference Services) that are substantially the same as the terms and conditions set out in the Standard Shipper Contract.[71]

466. DBP has made submissions to the Authority opposing the establishment of terms and conditions substantially the same as the Standard Shipper Contract, on the basis that it is not reasonable that the Access Arrangement should include the T1 Service, Part Haul Service and Back Haul Service as Reference Services.[72]

[71] Apache Energy, North West Shelf Gas, Western Mining Corporation and Western Power.

[72] DBP Submission #36.

467. DBP has further submitted that, if the Authority maintains the requirements for the T1 Service, Part Haul Service and Back Haul Service to be included in the Access Arrangement as Reference Services, then it is not reasonable to require that the terms and conditions for the Services be substantially the same as the terms and conditions established under the Standard Shipper Contract.[73] DBP has submitted that if terms and conditions for the Reference Services contemplated by the Authority are to be derived from the Standard Shipper Contract, then the terms and conditions of the Standard Shipper Contract should be revised:

- to remove provisions that relate to the rights of Users to demand additional Capacity in the DBP;
- to remove provisions relating to the adjustment of the tariff from 2011 and beyond;
- to remove provisions that relate to the adjustment of the negotiated tariff to a Reference Tariff for the closest equivalent service to the T1 Service in 2016;
- to remove particular provisions that DBP claims are of "value" to Users and/or which give rise to additional costs to DBP, on the basis that this value and/or these costs would not be reflected in the Reference Tariff (where these provisions relate specifically to imbalances, peaking, overrun, relocation of Receipt Points and Delivery Points, relinquishment of Capacity and trading of Capacity); and
- to adjust provisions in terms and conditions for Part Haul and Back Haul Services to reflect practical differences in providing these Services from providing the Full Haul Service.[74]

Final Decision

468. In this Final Decision, the Authority maintains the requirement first expressed in its Draft Decision that the Proposed Access Arrangement be amended to remove the Tf Service as a Reference Service and to include the T1 Service, a Part Haul Service and a Back Haul Service as Reference Services. The Authority also maintains the view that the Access Arrangement should include terms and conditions for these Reference Services that are substantially the same as the terms and conditions set out in the Standard Shipper Contract, with the exception of the terms and conditions that relate to a gas quality specification and as set out below.

469. Notwithstanding this, the Authority recognises that not all elements of the terms and conditions of the Standard Shipper Contract should properly be included in the terms and conditions for Reference Services under the Access Arrangement. Elements of the terms and conditions under the Standard Shipper Contract that may properly be excluded from terms and conditions for the Reference Services include those elements relating to matters such as the special tariff arrangements entered into by Users for the period to 2016 and the obligations on DBP to expand the Capacity of the pipeline to meet the requirements of Users.

470. These matters aside, and apart from the matters expressly addressed below, the Authority considers that terms and conditions that relate to the characteristics of the

[73] DBP Confidential Submission #36

[74] DBP Confidential Submission #36, paragraph 1.6 and *passim*.

gas transmission service and the associated rights and obligations of DBP and Users should be substantially the same in the terms and conditions for the Reference Services as exist under the Standard Shipper Contract. The Authority does not accept that revisions to the Standard Shipper Contract mooted by DBP are appropriate in deriving terms and conditions for the Reference Services (revisions relating to imbalances, peaking, overrun, relocation of Receipt Points and Delivery Points, relinquishment of Capacity and trading of Capacity).

471. In coming to this view, the Authority has taken into account the following considerations.

472. Firstly, DBP has made a general claim that the terms and conditions of the Standard Shipper Contract that DBP seeks to revise give rise to higher costs in provision of the Service, and these costs would not be reflected in the Reference Tariff for the T1 Service under the Access Arrangement. DBP has not, however, substantiated this claim. Moreover, DBP has not provided the Authority with any information to indicate or suggest that the forecasts of costs provided for determination of Reference Tariffs are anything other than forecasts of the costs that will actually be incurred by DBP over the Access Arrangement Period (i.e. in provision of the T1 Service under the terms and conditions of the Standard Shipper Contract). As such, there is no reason for the Authority to consider that the maintenance of the relevant terms and conditions of the Standard Shipper Contract in the terms and conditions for Reference Services will result in DBP incurring costs in excess of forecasts used in determining the Reference Tariffs.

473. Secondly, in determination of terms and conditions and Reference Tariffs, the Authority does not consider it to be a relevant matter whether, as claimed by DBP, the provisions of the terms and conditions that DBP seeks to revise provide additional "value" to Users that is reflected in the T1 Tariff under the Standard Shipper Contract but would not be reflected in the (lower) Reference Tariff. DBP has submitted that the inclusion of terms and conditions that would require the same benefits to be extended to parties entering into contracts for the Reference Service as exist for parties under the Standard Shipper Contract would adversely affect its legitimate business interests. The Authority does not accept that the legitimate business interests of DBP would extend to an ability of DBP to charge prices for Reference Services that are not reasonable and not reflective of its costs. Under the regulatory scheme established by the Code, Reference Tariffs are determined on the basis of forecast costs and demand. The only process by which particular terms and conditions may affect the Reference Tariff is through an effect on the costs of Service provision or demand for the Service, neither of which DBP has demonstrated.

474. Thirdly, the Authority has considered the specific changes proposed by DBP to the terms and conditions of the Standard Shipper Contract, taking into account:

- the provisions of the terms and conditions for the Reference Service under the Current Access Arrangements (the terms and conditions for the Firm Service); and
- the factors of section 2.24 of the Code, as set out below.

Imbalances and Peaking

475. Provisions of the Standard Shipper Contract relating to imbalances and peaking are summarised as follows.

- The Imbalance Limit under the Standard Shipper Contract is eight per cent of the sum of Shipper's Capacity under Spot Transactions and quantities referred to as Contracted Capacity across all of Shipper's Capacity Services (clause 9.5(a)). Therefore, the eight per cent is a total amount across all of the Shipper's contracted capacity, not a percentage of the Shipper's capacity for the T1 Service.

- The "Outer Accumulated Imbalance Limit" is 20 per cent of the Shipper's contracted capacity (clause 9.6(a) of the Standard Shipper Contract). The Outer Accumulated Imbalance Limit is the limit where, if exceeded, the Shipper must pay an Excess Imbalance Charge.[75]

- Peaking Limits in the Standard Shipper Contract terms and conditions set up a two-stage process for dealing with hourly peaking. The Hourly Peaking Limits are 125 per cent in winter and 120 per cent in summer of the aggregate MHQ (1/24 of the sum of the Shipper's Capacity Services for that Gas Day). If a Shipper exceeds the Hourly Peaking Limit, the Operator may issue a notice requiring a Shipper to reduce its take of gas or the Operator may refuse to deliver Gas if the Operator, acting as a Reasonable and Prudent Person, considers that a continuation:

  – will have a material adverse impact on the integrity or operation of the DBNGP; or

  – will adversely impact, or is likely to adversely impact, on any other Shipper's entitlement to its Daily Nomination for T1 Capacity, Contracted Firm Capacity or any other Reserved Service.

- If the Shipper's Hourly Quantity is not within the Hourly Peaking Limit after a notice is issued then the Shipper must pay an Hourly Peaking Charge.

- If the Shipper exceeds the Outer Hourly Peaking Limit (140 per cent of the aggregate MHQ) then DBP may issue the Shipper with a notice and, if the Outer Hourly Peaking Limit is still exceeded, the Shipper will be liable for an Hourly Peaking Charge.

- The Operator must not refuse to deliver gas if a Shipper is not exceeding its Outer Hourly Peaking Limit and the Shipper is a Distribution Networks Shipper in circumstances set out in clause 10.7(a) or the Operator proposes to refuse to deliver gas as a result of the circumstances set out in clause 10.7(b).

476. DBP submits that the inclusion of the Outer Accumulated Imbalance Limit and the Outer Hourly Peaking Limit in the Standard Shipper Contract as terms and conditions for Reference Services under the Access Arrangement is not reasonable as the inclusion of these terms in the Standard Shipper Contract was a benefit obtained by Shippers who negotiated their contracts as part of the pipeline acquisition. Further, DBP submits that the Current Access Arrangement does not provide for an Outer Imbalance Limit or Outer Hourly Peaking Limit and not including these provisions as terms and conditions for Reference Services under the Access Arrangement is necessary to enable the efficient operation of the pipeline and to ensure that all Shippers can access their contract capacity.

[75] This is subject to the factors listed in clause 9.6(c) of the SSC.

477. The provisions of the terms and conditions for the Firm Service under the Current Access Arrangement relating to imbalances and peaking are summarised as follows.

- The Shipper's Imbalance Limit is eight per cent of the Shipper's MDQ. The "MDQ" is defined as the aggregate of the Shipper's Delivery Point MDQ's. A Delivery Point MDQ is the "maximum quantity of gas that the Shipper may require [DBP] to deliver on a Day at a single Delivery point as specified in the Access Contract." The Access Contract is the contract formed between DBP and the Shipper when DBP accepts an Access Request. An Access Request is a request for access to the Firm Service. Accordingly, the eight per cent of the Shipper's MDQ is for the *Firm Service only* and not for the total of the Shipper's contracted capacity at the relevant time.

- A Shipper is liable to pay an Excess Imbalance Charge where the Shipper has exceeded the Shipper's Imbalance Limit. However, the Shipper is only liable to pay the Excess Imbalance Charge where the Shipper's Imbalance:

  – causes actual pecuniary loss or damages; or

  – in the reasonable opinion of the pipeline operator the Shipper's Imbalance exposes the pipeline to a significant risk (whether or not that risk becomes manifest) that threatens the integrity of the pipeline.

  There is no such restriction on the payment of the Excess Imbalance Charge in the Standard Shipper Contract.

- The terms and conditions for the Firm Service under the Current Access Arrangement do not contain the "Outer Accumulated Imbalance Limit" of the Standard Shipper Contract. Under the terms and conditions for the Firm Service the Excess Imbalance Charge would therefore apply to a lesser extent of imbalance than under the terms and conditions of the Standard Shipper Contract.

- Under the terms and conditions for the Firm Service under the Current Access Arrangement, the Hourly Peaking Limit is 120 per cent of 1/24 of Shipper's Delivery Point MDQ at that Delivery Point. There is no provision for the "Outer Hourly Peaking Limit" as exists under the Standard Shipper Contract. As such, the 120 per cent limit on peaking only applies to the MDQ for the *Firm Service only* and not for the total of the Shipper's contracted capacity at the relevant time, as would apply under the Standard Shipper Contract.

- The Hourly Peaking Charge (called the Peaking Surcharge in the Access Arrangement) is only payable where:

  – the Shipper's Peaking causes actual pecuniary loss or damages; or

  – in the reasonable opinion of the pipeline operator the Shipper's Peaking exposes the pipeline to a significant risk (whether or not that risk becomes manifest) that threatens the integrity of the pipeline.

- This limitation does not apply under the Standard Shipper Contract.

- DBP may also refuse to deliver gas to the Shipper at any time the Shipper exceeds the Shipper's MHQ.

478. Section 2.24(a) of the Code requires that the Authority take into account the Service Provider's legitimate business interests and investment in the pipeline.

479. DBP has stated that the Outer Accumulated Imbalance Limit and the Outer Hourly Peaking Limit were benefits for Shippers who renegotiated contracts. DBP has argued that the inclusion of terms and conditions that would require the same benefits to be extended to parties entering into short term contracts paying the Reference Tariff would have an effect upon its legitimate business interests. However, whether such terms are included in the revised Access Arrangement will not affect previous negotiations as DBP and the Shippers have already signed contracts for the provision of a T1 Service. Moreover, DBP has not provided any evidence to suggest that the provision of Reference Services with the same terms relating to imbalances would give rise to costs to DBP that are not allowed for in the determination of Reference Tariffs. The Authority does not accept that the legitimate business interests of DBP would extend to an ability of DBP to charge prices for Reference Services that are not reasonable and not reflective of its costs. There does not appear, therefore, to be any basis for considering that DBP's interests will be adversely affected by the inclusion of these terms.

480. Section 2.24(b) of the Code requires that the Authority take into account the firm and binding contractual obligations of the Service Provider or other persons (or both) already using the Covered Pipeline.

481. The Authority notes that the pipeline is currently contracted for provision of Full Haul Services on the terms and conditions of the Standard Shipper Contract. On this basis, the terms of the Standard Shipper Contract can be considered to be consistent with an ability for DBP to meet its contractual obligations. Accordingly, in the Authority's view, the inclusion of the same terms in the revised Access Arrangement is unlikely to affect the ability of DBP or existing Users to meet their contractual obligations.

482. Section 2.24(c) of the Code requires that the Authority take into account the operational and technical requirements necessary for the safe and reliable operation of the Covered Pipeline.

483. Section 2.24(d) of the Code requires that the Authority take into account the economically efficient operation of the Covered Pipeline.

484. Noting that the pipeline is currently contracted for provision of Full Haul Services on the terms and conditions of the Standard Shipper Contract, the Authority is of the view that there is no reason to consider that the adoption of the terms of the Standard Shipper Contract in the revised Access Arrangement would be contrary to the operational and technical requirements necessary for the safe and reliable operation of the pipeline nor the economically efficient operation of the pipeline.

485. Section 2.24(e) of the Code requires that the Authority take into account the public interest, including the public interest in having competition in markets (whether or not in Australia).

486. Section 2.24(f) of the Code requires that the Authority take into account the interests of Users and Prospective Users.

487. In the Authority's view, if the Outer Accumulated Imbalance Limit is removed from the terms and conditions the interests of Users and Prospective Users will be adversely affected. Currently, Users and Prospective Users who access the DBNGP on the

terms and conditions of the Current Access Arrangement will only have to pay an Excess Imbalance Charge if the Shipper's Imbalance:

- causes actual pecuniary loss or damages; or
- in the reasonable opinion of the pipeline operator the Shipper's Imbalance exposes the pipeline to a significant risk (whether or not that risk becomes manifest) that threatens the integrity of the pipeline.

488. If the Access Arrangement were revised to incorporate the imbalance provisions of the Standard Shipper Contract without the Outer Accumulated Imbalance Limit then the Excess Imbalance Charge could be levied in any circumstance when the Shipper is over its Imbalance Limit.

489. In the Authority's view, the interests of Users and Prospective Users are better served if the Excess Imbalance Charge is referenced to the seriousness of the conduct. That is, by referencing it to actual detriment (as in the Current Access Arrangement) or by referencing it to particular conduct which is likely to threaten the integrity of the pipeline as an incentive for a User not to engage in that conduct (as in the Standard Shipper Contract with the Outer Accumulated Imbalance Limit).

490. In the Authority's view, if the Outer Hourly Peaking Limit is removed from the terms and conditions the interests of a class of Users and Prospective Users, being Distribution Networks Shippers, will be adversely affected. The Authority notes that the Outer Hourly Peaking Limit is only a benefit for Distribution Networks Shippers or Shippers affected by Distribution Networks Shippers pursuant to clause 10.7(b) of the Standard Shipper Contract. In other situations the peaking provisions will apply and DBP will have an option to cease delivery of gas to the peaking shipper or, under certain circumstances, levy the Hourly Peaking Charge. The inclusion or otherwise of the Outer Hourly Peaking Limit will not affect DBP's rights. It is only the particular class of Shipper being a Distribution Networks Shipper who will be able to derive any benefit from the Outer Hourly Peaking Limit.

491. In the Authority's view, the exclusion of the Outer Hourly Peaking Limit from the terms and condition for Reference Services under the Access Arrangement is not in the interests of Users and Prospective Users who are, or may be, a Distribution Networks Shipper. Further, the Authority is concerned that, without such a provision, existing Distribution Networks Shippers will be advantaged over a prospective Distribution Networks Shipper (who otherwise would be liable for Hourly Peaking Charges due to the nature of its operation) which is not in the interests of competition in the downstream market for gas and consequently not in the public interest.

492. Therefore, in the Authority's view, and taking into account the section 2.24 factors, the Outer Accumulated Imbalance Limit and the Outer Hourly Peaking Limit are reasonable terms and should be included in the terms and conditions for Reference Services under the Access Arrangement.

Overrun

493. DBP has proposed that the terms and conditions of the T1 Reference Service provide that a Shipper cannot take overrun gas under any circumstances. DBP state that this is important in order to:

- reflect the physical limitations of the pipeline system;

- reflect the Authority's proposed changes to the tariff structure; and
- ensure that all Shippers can access their contracted capacity.

494. Provisions of the Standard Shipper Contract relating to overrun are summarised as follows.

- There is an implicit right of Shippers to take overrun.
- The Overrun Charge under the Standard Shipper Contract (called the Overrun Rate) is the greater of:
  - 115 per cent of the Base T1 Tariff; and
  - the highest bona fide price bid accepted for Spot Capacity for that Gas Day.

495. The terms and conditions for the Firm Service under the Current Access Arrangement relating to overrun are summarised as follows.

- Clause 5 of the terms and conditions of the Current Access Arrangement provides that Shippers may take overrun gas.
- The maximum overrun charge in the Current Access Arrangement (depending on the amount and location of the overrun) will be:
  - 110 per cent of the Capacity Charges which would otherwise be payable for each GJ of gas delivered to the Shipper at the Delivery Point in excess of the Shipper's Delivery point MDQ; or
  - 110 per cent of the highest price paid on the Secondary Market on that Day.

496. DBP has proposed that there be no provision for overrun under the terms and conditions established for Reference Services under the Access Arrangement.

497. The Authority notes, firstly, that DBP's proposal is inconsistent with the terms and conditions for the Firm Service under the Current Access Arrangement.

498. The Authority has also considered the section 2.24 factors in deciding whether the access to overrun is reasonable.

499. Concerning section 2.24(a) and (b) of the Code, the Authority notes that the pipeline is currently fully contracted to Full Haul Capacity on the terms and conditions of the Standard Shipper Contract. Under those terms and conditions every shipper may access overrun gas on the terms and conditions in the Standard Shipper Contract. The Authority consequently does not consider that the inclusion of similar terms in the terms and conditions for Reference Services under the Access Arrangement would affect DBP's legitimate business interests and investment in the pipeline. Similarly, the terms of the Standard Shipper Contract can be considered to be consistent with an ability for DBP to meet its contractual obligations. Accordingly, in the Authority's view, the inclusion of the same terms in the revised Access Arrangement is unlikely to affect the ability of DBP or existing Users to meet their contractual obligations.

500. The Authority does not have any material before it that would indicate that the adoption of such terms in the revised Access Arrangement would impact on the operational and technical requirements necessary for the safe and reliable operation

of the pipeline nor the economically efficient operation of the pipeline. The Authority also notes that under the terms of the Standard Shipper Contract DBP may issue an Unavailability Notice to stop a Shipper taking delivery of overrun gas. DBP may issue such a notice if it is of the view that the operation of the pipeline may be compromised by a Shipper taking overrun.

501. The Authority notes that the ability to take overrun gas, when available, is a benefit for Users and Prospective Users. It is a provision that has been negotiated in the Standard Shipper Contracts and is a provision of terms and conditions under the Current Access Arrangement. The Authority cannot see a compelling reason why it should not be included in the revised Access Arrangement. Further, the Authority notes that DBP is ultimately able to control whether a User is able to access overrun gas by the issue (or not) of an Unavailability Notice.

502. Taking into account the terms of the current Access Arrangement and the factors of section 2.24 of the Code, the Authority takes the view that the Overrun provisions in the Standard Shipper Contract are reasonable and should be included in the terms and conditions for Reference Services under the revised Access Arrangement.

Relocation and Capacity Trading

503. DBP has submitted that the terms and conditions of the T1 Reference Service should not permit the relocation of contracted capacity. DBP argues that such provisions under the Standard Shipper Contract are a benefit negotiated by Shippers who renegotiated their contracts as part of the pipeline acquisition, and that the absence of these provisions from terms and conditions for Reference Services under the Access Arrangement is necessary to enable the efficient operation of the pipeline.

504. The provisions of the Standard Shipper Contract for relocation of Receipt Points and Delivery Points and for trading of Capacity are in accordance with the Trading Policy of the Proposed Access Arrangement and the explicit requirements of the Code. The Authority is concerned that removal of these provisions from the terms and conditions for the Reference Services, as proposed by DBP, may enable DBP to establish terms and conditions for the Reference Services that are contrary to the Trading Policy and the requirements of the Code. The Authority also notes that the Current Access Arrangement provides for relocation of Capacity across Delivery and Receipt Points.

505. Section 3.10 of the Code sets out the principles with which a Trading Policy must comply. Section 3.10(a) states that, in the case of a “bare transfer”, a User “must be permitted to transfer or assign all or part of its Contracted Capacity without the consent of the Service Provider concerned”.

506. The terms and conditions for Reference Services under the Access Arrangement must be consistent with the Trading Policy and therefore must comply with section 3.10 of the Code.

507. Accordingly, the Authority is of the view that in deriving terms and conditions for Reference Services from the Standard Shipper Contract, the provisions of the Standard Shipper Contract (relevantly clause 25.3) should be amended to provide for a bare transfer of capacity with the only obligations being:

- the transferee must notify the Service Provider prior to utilising the portion of the contracted capacity the subject of the bare transfer; and

- the Service Provider must be notified of the nature of the contracted capacity the subject of the bare transfer.

508. In, addition:

- Clause 25.4 of the Standard Shipper Contract should be amended to exclude bare transfers from the requirement to sign a deed of assumption; and

- Clause 27 of the Standard Shipper Contract should be amended to "carve out" bare transfers of capacity.

Relinquishment of Capacity

509. Clause 26 of the Standard Shipper Contract makes provision for Shippers under the contract to relinquish contracted Capacity. DBP has proposed that if terms and conditions for Reference Services are to be derived from the Standard Shipper Contract, then the provisions relating to relinquishment of Capacity should be removed.

510. The Authority has examined clause 26 of the Standard Shipper Contract and notes that the provisions of this clause do no more than establish a process for relinquishment of Capacity in the event that a User and DBP agree for this to occur. There are no rights or obligations for relinquishing Capacity created by these provisions. As such, the Authority does not consider that there is any reason for these provisions to be removed in deriving terms and conditions for Reference Services from those of the Standard Shipper Contract.

Conclusion

511. The Authority maintains the view that the Access Arrangement should include terms and conditions for the T1 Service, Part Haul Service and Back Haul Service (all as Reference Services) that are substantially the same as the terms and conditions set out in the Standard Shipper Contract, with the exception of the amendments to the Capacity trading provisions referred to above and the terms and conditions that relate to a gas quality specification (for reasons as set out below). Taking the above matters into account, the Authority has drafted terms and conditions for the three Reference Services. These are provided as Appendix 1 of this Final Decision. Accordingly, the Authority requires the following amendments to the Proposed Access Arrangement.

Final Decision Amendment 12

The Proposed Access Arrangement should be amended to include terms and conditions for the T1 Service (as a Reference Service) as set out in Appendix 1 of this Final Decision.

Final Decision Amendment 13

The Proposed Access Arrangement should be amended to include terms and conditions for the Part Haul Service and Back Haul Service (as Reference Services) as set out in Appendix 1 of this Final Decision.

Gas Quality

Relevant Issues and Draft Decision

512. Several submissions made to the Authority raised concerns with the gas quality specification set out in the proposed terms and conditions for the Tf Service. While the Authority indicated in its Draft Decision a requirement for removal of the Tf Service from the Access Arrangement (a requirement which has been maintained in this Final Decision), the concerns raised in regard to the gas quality specification relate generally to the gas quality specification that will apply to the Reference Service or Services that will ultimately be included in the Access Arrangement. It is in this context that the Authority considered the concerns expressed in submissions.

513. Under clause 2.1 of the proposed terms and conditions for the Tf Service, gas supplied by a User at a Receipt Point or delivered to a User (by DBP) at a Delivery Point is required to comply with the "Operating Specification", which is the gas quality specification specified in Item 1 of Schedule 2 of the proposed terms and conditions, as follows.

Proposed Gas-Quality Operating Specification for the Tf Service

Component		Receipt Points	Delivery Points
Maximum carbon dioxide (mol %)		3.6	4.0
Maximum inert gases (mol %)		5.5	6.0
Minimum higher heating value (MJ/m^3)		37.3	37.3
Maximum higher heating value (MJ/m^3)		42.3	42.3
Minimum Wobbe Index		47.3	47.3
Maximum Wobbe Index		51.0	51.0
Maximum total sulphur (mg/m^3)	Unodorised	10	10
	Odorised	n/a	20
Maximum Hydrogen Sulphide (mg/m^3)		2	2
Maximum Oxygen (mol %)		0.2	0.2
Maximum Water (mg/m^3)		48	48
Hydrocarbon dewpoint over the pressure range 2.5 to 8.72 MPa absolute		Below 0 ºC	Below 0 ºC
Maximum radioactive components (Bq/m^3)		600	600

514. The terms and conditions for the Tf Service also make provision for the Operating Specification to be changed (either formally or in practical effect) as a consequence of either a change in law that requires DBP to receive gas into the DBNGP with a level of one or more quality parameters outside the Operating Specification,[76] or a request from a User.[77] In the latter case, and subject to a range of conditions, DBP is obliged to meet a request from a User for a variation of the gas quality specification if

[76] Access Contract Terms and Conditions, clauses 2.8 and 2.9.

[77] Access Contract Terms and Conditions, clause 2.10.

the variation is within the limits of the "broadest specification" specified in Item 3 of Schedule 2 of the proposed terms and conditions, as follows.

Proposed Broadest Gas-Quality Operating Specification for the Tf Service

Component		Receipt Points and Delivery Points
Maximum carbon dioxide (mol %)		4.0
Maximum inert gases (mol %)		6.0
Minimum higher heating value (MJ/m^3)		37.3
Maximum higher heating value (MJ/m^3)		42.3
Minimum Wobbe Index		47.3
Maximum Wobbe Index		51.0
Maximum total sulphur (mg/m^3)	Unodorised	10
	Odorised	20
Maximum Hydrogen Sulphide (mg/m^3)		2
Maximum Oxygen (mol %)		0.2
Maximum Water (mg/m^3)		48
Hydrocarbon dewpoint over the pressure range 2.5 to 8.72 MPa absolute		Below 0 ºC
Maximum radioactive components (Bq/m^3)		600
Minimum extractable LPGs (t/TJ)		n/a

515. In the case of a change in law that requires DBP to receive gas into the DBNGP with a level of one or more quality parameters outside the Operating Specification, the obligation of DBP to change the Operating Specification will apply only where the change in the gas quality specification would not be contrary to any contract for supply of gas to the DBNGP or delivery of gas from the DBNGP. Further, the fact that the law or the Access Arrangement requires a broader specification does not immediately require DBP to amend all its existing contractual arrangements if there is no available Capacity.

516. In the case of a request from a User for a change in the gas quality specification the obligation of DBP to change the Operating Specification will apply only where:

- the change in the gas quality specification would not be contrary to any contract for supply of gas to the DBNGP or delivery of gas from the DBNGP;
- the change in the gas quality specification would not materially increase DBP's costs; and
- the change in the gas quality specification would not materially affect the Capacity of the DBNGP to transport gas.

517. The Standard Shipper Contract contains the same Operating Specification as that specified in the proposed terms and conditions for the Tf Service, with the exception that there is an additional gas quality parameter of "minimum extractable LPGs" for which there is a specification for gas received at Receipt Points, being

1.45 tonnes/TJ until 08:00 hours on 1 July 2005 and zero thereafter. The Standard Shipper Contract also contains the same provisions for the Operating Specification to be changed as a consequence of either a change in law or a request from a User.

518. Several parties made submissions to the Authority that the gas quality specification for the Reference Service or Services included in the Access Arrangement should conform to a specification known generally as the "Broadest Specification".[78] The Broadest Specification is a gas quality specification originally set out in the *Dampier to Bunbury Pipeline (WA) Regulations 1998*, along with an operating specification for gas quality at Receipt Points and Delivery Points. Under provisions of the Regulations, the Broadest Specification comprised limits on the extent to which the Operating Specification for the DBNGP could be widened, except in certain special circumstances. The Broadest Specification contained in the 1998 regulations was as follows.

[78] Apache Energy Limited, Australian Petroleum Production and Exploration Association, BHP Billiton Petroleum Pty Ltd, Newmont Australia Pty Ltd, North West Shelf Gas Joint Venture, Tiwest, WMC, Worsley Alumina Pty Ltd.

"Broadest Specification" for Gas-Quality under the *Dampier to Bunbury Pipeline Regulations 1998*

Component		Category A Gas (Receipt Points)	Category B Gas (Delivery Points at or upstream of the WLPG Plant)	Category C Gas (Delivery Points downstream of the WLPG Plant)
Maximum carbon dioxide (mol %)		3.6	4	4
Maximum inert gases (mol %)		6.5	7.0	7.0
Minimum higher heating value (MJ/m^3)		35.1	35.1	35.1
Maximum higher heating value (MJ/m^3)		42.3	42.3	42.3
Minimum Wobbe Index		46.0	46.0	46.0
Maximum Wobbe Index		51.5	51.5	51.5
Maximum total sulphur (mg/m^3)	Unodorised	10	10	10
	Odorised	20	20	20
Maximum Hydrogen Sulphide (mg/m^3)		2	2	2
Maximum Oxygen (mol %)		0.2	0.2	0.2
Maximum Water (mg/m^3)		48	48	48
Hydrocarbon dewpoint over the pressure range 2.5 to 8.72 MPa absolute		Below 0 ºC	Below 0 ºC	Below 0 ºC
Maximum radioactive components (Bq/m^3)		600	600	600
Minimum extractable LPGs (t/TJ)		Until 08:00 hours on 1 July 2005: 1.45 From 08:00 hours on 1 July 2005: 0:00	n/a	n/a

519. The "broadest specification" under the terms of the proposed Tf Service and under the Standard Shipper Contract is a more stringent specification than the "Broadest Specification" under the *Dampier to Bunbury Pipeline Regulations 1998*. The broadest specification under the terms of the proposed Tf Service and under the Standard Shipper Contract has more stringent limits for "maximum inert gases", "minimum higher heating value", "minimum Wobbe index" and "maximum Wobbe index".

520. The *Dampier to Bunbury Pipeline Regulations 1998* ceased to have effect when an approved Access Arrangement for the DBNGP commenced in January 2004. At that time, and in the absence of relevant regulations by the Coordinator for Energy, regulatory oversight of the gas quality specification for the DBNGP fell to the Authority in the function of approving the Access Arrangement and any revisions to the Access Arrangement, to the extent that a gas quality specification forms part of the terms and conditions for a Reference Service.

521. There are two other important elements in the context of a gas quality specification for the DBNGP:

- gas quality standards for natural gas supplied to a gas end-user through a distribution system or used for domestic purposes in an industrial facility; and
- contractual requirements for the transportation of LPG through the DBNGP.

522. Gas quality standards for natural gas supplied to a gas end-user through a distribution system or used for domestic purposes in an industrial facility were established by the *Gas Standards (Gas Supply and System Safety) Regulations 2000*, under the *Gas Standards Act 1972.* These standards would apply to gas delivered through the Mid-West and South-West Gas Distribution Systems, which receive gas from the DBNGP. The standards established under the regulations are as follows.

Gas-Quality Specification under the *Gas Standards (Gas Supply and System Safety) Regulations 2000*

Component		Standard
Maximum carbon dioxide (mol %)		n.a.
Maximum inert gases (mol %)		n.a.
Minimum higher heating value (MJ/m^3)		37.0
Maximum higher heating value (MJ/m^3)		42.3
Minimum Wobbe Index		46.5
Maximum Wobbe Index		51.0
Maximum total sulphur (mg/m^3)	Unodorised	n.a.
	Odorised	50
Maximum Hydrogen Sulphide (mg/m^3)		n.a.
Maximum Oxygen (mol %)		n.a.
Maximum Water (mg/m^3)		n.a.
Hydrocarbon dewpoint over the pressure range 2.5 to 8.72 MPa absolute		n.a.
Maximum radioactive components (Bq/m^3)		n.a.
Minimum extractable LPGs (t/TJ)		n.a.

523. The gas quality standards established under the *Gas Standards (Gas Supply and System Safety) Regulations 2000* are more stringent (i.e. narrower) than the Broadest Specification (for Category C gas) established under the *Dampier to Bunbury Pipeline Regulations 1998* (in respect of minimum higher heating value and minimum Wobbe index) but less stringent than the broadest specification of DBP as set out in the proposed terms and conditions for the Tf Service and in the Standard Shipper Contract.

524. The second additional element to the context of the gas quality specification for the DBNGP is the contractual arrangements to supply LPGs to the Wesfarmers LPG plant. Contractual arrangements for the supply of LPGs to the Wesfarmers LPG plant have been supported by the past regulatory requirement for a minimum LPG

content of 1.45 tonnes/TJ and the maximum inerts concentration of 5 mol per cent in gas delivered to the DBNGP. The earliest opportunity for review of contractual arrangements for the supply of LPGs to the Wesfarmers LPG plant and, hence, the earliest opportunity to alter the gas quality standards for LPG content and inerts concentration, was 1 July 2005.

525. As a gas quality specification will form a provision of terms and conditions for a Reference Service under the Access Arrangement, the Authority, in accordance with the requirements of section 3.6 of the Code, must be satisfied that the specification is reasonable.

526. DBP provided the Authority with explanatory information on the provisions relating to the gas quality specification in the terms and conditions of the proposed Tf Service and the Standard Shipper Contract, as well as the implications for DBP of a move to a broader gas quality specification.[79]

527. As indicated above, several parties made submissions to the Authority requesting that the Authority require amendment of the Proposed Access Arrangement to include a wider gas quality specification in the terms and conditions of a Reference Service or Services.

528. In general, the submissions indicated that a wider gas quality specification is favoured by gas producers and some end-users of gas as an energy source. The reason given for this was that a wider specification would potentially reduce the costs of gas through expanding the potential sources of supply of gas to the DBNGP, increasing competition between these sources, and reducing gas processing costs.[80] In addition, these parties also set out in submissions several reasons why the Authority should require a wider gas quality specification for a Reference Service under the Access Arrangement:

- the introduction of a wider gas quality specification has been anticipated since 1995, and has been expected by gas producers, Users of the DBNGP and end-users of gas to occur on 1 July 2005 with the falling away of the regulatory requirement for a minimum concentration of LPGs in gas delivered to the DBNGP;

- the widening of the gas quality specification of the DBNGP would allow alignment with the gas quality specifications for the GGP, Parmelia Pipeline and AlintaGas Distribution Systems, thus improving prospects for gas trading and use of the Mondarra gas storage facility;

- the widening of the gas quality specification would alter the specification to be close to a national gas quality standard;

- there are no technical or safety issues preventing adoption of a wider gas quality specification that is the same as the Broadest Specification previously set out in the *Dampier to Bunbury Pipeline Regulations 1998*;

[79] DBP, Submissions #7, #21.

[80] Apache Energy Limited, Australian Petroleum Production and Exploration Association, BHP Billiton Petroleum Pty Ltd, Newmont Australia Pty Ltd, North West Shelf Gas Joint Venture, Tiwest, WMC.

- while a widening of the gas quality specification to the Broadest Specification set out in the *Dampier to Bunbury Pipeline Regulations 1998* would have the effect of reducing the Capacity of the pipeline, the effect is relatively small; and

- any resultant reduction in the cost of gas as an energy source would promote the use of gas over other fuels with corresponding reductions in greenhouse gas emissions.

529. Furthermore, one party has also indicated that not implementing the Broadest Specification would be to the financial detriment of the State of Western Australia due to the State receiving lower revenues from condensate, LPG and LNG production than if the Broader Specification were to be introduced. There has not been, however, any submission from the State that this is either the case or that it is a matter about which the State is concerned.

530. A wider gas quality specification was opposed by some end users of gas as an energy source and end users of gas as a production feedstock.[81] These parties indicated that a wider gas quality specification – particularly a lower minimum limit on the energy content of gas and a higher allowable concentration of inert gases – will cause additional costs to be incurred by end users of gas through costs of gas pre-treatment where gas is used as a production feedstock or by adverse effects on the use of gas in gas-fired turbines for electricity generation. The parties opposing a widening of the gas quality specification also made a number of counter arguments against the cited benefits by variously contending that:

- current Users of the DBNGP have just re-negotiated contracts for gas transmission with provisions that make possible a widening of the gas quality specification and there is no necessary role of the Authority in making a determination that displaces these contract provisions;

- a widening of the gas quality specification would require some modification of domestic gas appliances;

- the widening of the gas quality specification was always intended to be subject to further consultation and commercial negotiation amongst interested parties and the Access Arrangement is not the appropriate vehicle for implementing a wider gas quality specification;

- the benefits of a wider gas specification in increasing the potential sources of gas for supply to the DBNGP are over-stated, as options currently exist for blending of gas from multiple sources such that the current gas quality specification can be met;

- there is no current need for alignment of gas quality specifications for the DBNGP, Goldfields Gas Pipeline, Parmelia Pipeline and the AlintaGas distribution systems; and

- a widening of the gas quality specification would reduce the Capacity of the DBNGP and increase costs of gas transmission to Users.

531. In its Draft Decision, the Authority gave consideration to the views expressed in submissions, as set out below.

[81] Submissions from Alcoa, Alinta Power Services, CSBP.

532. Firstly, the Authority noted that there are conflicting views presented in submissions in regard to whether, and the process by which, a wider gas quality specification for the DBNGP would be introduced. The Authority considered that it is clear from the 1995 report of the Office of Energy and from the provisions of the *Dampier to Bunbury Pipeline Regulations 1998* that there has been a clear policy intention of the Government for the gas quality specification to be widened. In recognition that there were a number of pre-existing contracts that prevented a widening of the gas quality specification without renegotiation of these contracts, the regulations did not impose a wider gas quality specification. Rather, the regulations foreshadowed a widening of the specification, and set out the Broadest Specification, for the purpose of making it clear to the pipeline owner and to Users that the renegotiation of existing contracts or entry into new contracts with a gas quality specification narrower than the Broadest Specification would be at the commercial risk of the parties to these contracts.

533. The Authority indicated in its Draft Decision that it was not aware of any gas transmission contracts for the DBNGP that pre-date the 1998 regulations and which have not been subject to renegotiation during or after 1998. As such, the Authority took the view that no party should oppose the broadening of the gas quality specification for reason of an erosion of current contractual rights. The Authority now accepts that this is not a relevant consideration as section 2.47 of the Code does not permit the revised Access Arrangement to deprive a party of certain pre-existing rights, regardless of whether it was reasonable or not for the parties to enter into those agreements.

534. Secondly, there were conflicting views expressed as to whether a broadening of the gas quality specification would create problems in the operation and/or safety of domestic gas appliances. The Authority sought advice on this matter from the Director of Energy Safety and, subsequently, the Director of Gas and Emergency Management, of the Department of Consumer and Employment Protection.[82] On the basis of this advice, the Authority was satisfied that the broadening of the gas quality specification in the DBNGP to the Broadest Specification as set out in the *Dampier to Bunbury Pipeline Regulations 1998* would not be reason for concern over operation or safety in the use of domestic gas appliances.

535. Thirdly, there were conflicting views expressed as to whether a widening of the gas quality specification would give rise to benefits to consumers of gas through increasing the possible sources of gas for supply to the DBNGP and increasing competition between gas suppliers. While there did not seem to be any dispute over whether a widening of the gas quality specification would increase the number of possible sources of gas, opponents to a wider specification contended that the claimed benefits of a larger number of possible sources are overstated, as gas from all sources may already be supplied to the DBNGP through arranging for blending of gas from different sources so as to meet gas quality requirements. In its Draft Decision, the Authority did not accept this contention. Blending of gas from multiple sources is only possible if another gas producer provides "better-than-specification" gas in order that parties with a "lower-than-specification" gas can blend the two gas streams. The availability of better-than-specification gas into the future is not assured and consequently the opportunity to blend gas streams is also not assured. In any event, blending of gas streams gives rise to a number of commercial issues insofar as a provider of better-than-specification gas may object to blending

[82] Letter from the Director of Energy Safety to the Economic Regulation Authority, 23 February 2005; Letter from the Director of Gas and Emergency Management to the Economic Regulation Authority, 19 April 2005.

arrangements with suppliers of lower-than-specification gas without adequate commercial consideration.

536. Fourthly, there were conflicting views expressed in submissions as to whether there is a need or benefit in aligning gas quality specifications for the DBNGP, Goldfields Gas Pipeline, Parmelia Pipeline and AlintaGas distribution systems. In this respect, the Authority took the view that an alignment of gas quality specifications across pipelines is, in principle, desirable for allowing manufacturers of gas-using appliances to produce appliances suitable for a known and widely applied gas standard. The Authority also took the view that there are benefits of consistent gas quality specifications between the Parmelia Pipeline and DBNGP in allowing the interchange of gas between these pipelines and to and from the Mondarra gas storage facility.

537. Finally, there were conflicting views on the extent to which the Capacity of the DBNGP would be reduced by a widening of the gas quality specification. In this regard, the Authority noted that the effect of the change in gas quality specification on the Capacity of the DBNGP is primarily determined by the change, if any, on the specification for minimum higher heating value. The Authority also noted that this specification is substantially affected by the required LPG content for gas received into the DBNGP. As a minimum LPG content is not required after 1 July 2005, the remaining difference in minimum higher heating value between DBP's proposed Operating Specification and either the Broadest Specification of the *Dampier to Bunbury Pipeline Regulations 1998* or the broader specification set out by DBP in the Standard Shipper Contract is relatively small. In making its Draft Decision, the Authority therefore did not accept that a broadening of the gas quality specification from that proposed by DBP is likely to have a substantial effect on the Capacity of the DBP.

538. Accordingly, the Authority took the view in its Draft Decision that it would be unreasonable for the terms and conditions for Reference Services to not include a wider gas quality specification than the Operating Specification proposed by DBP for the Tf Service.

539. The context of the Authority's consideration of the gas quality specification under the Draft Decision was that the Authority was requiring that the Access Arrangement include a Reference Service in the nature of the T1 Service to which the Standard Shipper Contract relates, and terms and conditions for this Reference Service that are substantially the same as terms and conditions set out in the Standard Shipper Contract. The Authority presumed that, in meeting this requirement, DBP would include in these terms and conditions the gas quality specification currently required under the Standard Shipper Contract – the Operating Specification – and the relevant provisions of the Standard Shipper Contract for a change in the Operating Specification as a consequence of a change in law or a request from a User. Further, and in any event, the Authority notes that the proposed operating specification for the Tf Service are the same as those set out in the Standard Shipper Contract. The first question then addressed by the Authority in respect of the gas quality specification was therefore whether these provisions of the Standard Shipper Contract are reasonable.

540. As indicated by submissions made to the Authority, some gas producers and end-users of gas as a fuel regard the provisions of the Standard Shipper Contract that relate to gas quality as unreasonable as the Operating Specification is not a wider specification, such as either the Broadest Specification established by the *Dampier to Bunbury Pipeline Regulations 1998* or the broadest specification included by DBP in

the terms and conditions for both the Tf Service and under the Standard Shipper Contract.

541. Existing Users are bound by the terms of contracts entered into in late 2004 that require gas quality to comply with the Operating Specification as stated in the Standard Shipper Contract, or as widened in accordance with the provisions of the Standard Shipper Contract. DBP is also bound by the Operating Specification in terms of its obligation to receive gas into the DBNGP and to deliver gas from the DBNGP. The Standard Shipper Contract makes provision for a change in the Operating Specification, but only as a coordinated exercise that would see the Operating Specification being changed for all Users, made necessary by the co-mingling of gas in the pipeline and the inability to have differing gas qualities delivered to different Users. For a change in the Operating Specification for one User to occur, there must be two preconditions satisfied.

- There must be no shipper with an inconsistent existing contractual specification, that is, the amendment must not cause a material breach by DBP of contractual requirements to receive or deliver gas of a particular quality from or to any other User.

- DBP must actually receive into the DBNGP gas outside the existing Operating Specification but within the broader gas specification (as set out in the Standard Shipper Contract) to such an extent that it is unable to comply with the existing Operating Specification for a particular Delivery Point. That is, there must be a need for the Operating Specification to change, rather than there simply being ability for DBP to receive out-of-specification gas into the DBNGP while still being able to meet its contractual obligations to deliver gas that meets the Operating Specification.

542. In addition to the requirements for a negotiated settlement of a wider gas quality specification with all Users, DBP may refuse to widen the Operating Specification if this would:

- materially increase DBP's costs; or

- materially adversely affect the Capacity of the DBNGP (expressed in units of energy) to transport gas.

543. The effect of these provisions for a change in the Operating Specification is to allow for the Operating Specification to be changed through a process of commercial negotiation between Users, DBP and – for the reason that Users would be required to change gas specifications in their contracts – possibly also some end-users of gas and gas producers.

544. On the basis of information provided to the Authority in submissions and in verbal communications with parties that made submissions, the Authority indicated in its Draft Decision that it is likely that a widening of the gas quality specification would give rise to substantial benefits to gas producers and a majority of end users of gas, and these benefits would be likely to outweigh the costs to the owners of the DBNGP and those end-users of gas that would be disadvantaged by a wider specification.

545. Notwithstanding the potential net benefit of a widening of the gas quality specification, the Authority considered that the reaching of a commercial settlement will be made difficult by the large number of parties that will need to be party to

negotiations and that have differing interests in a widening of the gas quality specification.

546. The Authority considered the factors of section 2.24 of the Code in addressing the question of whether the Operating Specification as set out in the terms and conditions for the Tf Service and in the Standard Shipper Contract would be a reasonable term under the terms and conditions for Reference Services for the forthcoming Access Arrangement Period. In doing so, the Authority gave particular consideration to the following matters.

- That DBP has a legitimate business interest in maintaining the Operating Specification as set out in the terms and conditions for the Tf Service and in the Standard Shipper Contract for reason that this gas quality specification is consistent with a higher Capacity of the DBP and a widening of the gas quality specification may impose a requirement on DBP to invest in an expansion of Capacity of the DBNGP in order to meet existing contractual obligations.

- A widening of the gas quality specification would potentially be of substantial benefit to many Users and Prospective Users through increasing the number of sources of gas for supply to the DBNGP, increasing competition in the upstream market for gas and reducing costs of gas treatment prior to supply of the DBNGP.

- While some Users of the DBNGP may incur costs as a result of a widening of the gas quality specification, the consideration given to such costs should be tempered by the fact that a widening of the gas quality specification has been foreshadowed for some 10 years, and Users would, or should, have taken this into account in contractual arrangements with gas suppliers and in processes for gas use.

- To the extent that introduction of a wider gas quality specification would increase competition in upstream markets for gas and potentially reduce gas prices, there is a public interest in the implementation of a wider specification.

547. Having considered the matters set out section 2.24 of the Code, the Authority determined that the persistence of the current gas quality specification for the DBNGP and the potential for substantial further delay in adoption of a wider gas quality specification was contrary to the interests of most pipeline users and gas producers and would be contrary to a public interest in expanding the potential sources of supply to the DBNGP. Given these considerations, the Authority took the view in its Draft Decision that terms and conditions for a Reference Service that do not incorporate a wider gas quality specification than the current Operating Specification beyond 30 June 2005 would be unreasonable.

548. The Authority noted in its Draft Decision that there are differing wider gas quality specifications that may replace the current Operating Specification for the DBNGP: the Broadest Specification as set out in the *Dampier to Bunbury Pipeline Regulations 1998*, the gas quality standards for natural gas established by the *Gas Standards (Gas Supply and System Safety) Regulations 2000*, and the broadest specification set out in the proposed terms and conditions for the Tf Service in the Proposed Access Arrangement and in the Standard Shipper Contract.[83]

[83] For ease of comparison, these different gas quality specifications are set out in a single table in Appendix 2 of this Final Decision.

549. The Authority recognised that, while the proposal to introduce a wider gas quality specification was initially framed in terms of the Broadest Specification of the *Dampier to Bunbury Pipeline Regulations 1998*, the introduction of the *Gas Standards Regulations 2000* has subsequently imposed more stringent limits to gas quality for some quality parameters for the Mid-West and South-West Gas Distribution Systems. Taking these regulations into account, the Authority considered that there is no practical reason why a wider gas quality specification contemplated for the DBNGP should be any narrower than the more stringent of the standards established by either the Broadest Specification of the *Dampier to Bunbury Pipeline Regulations 1998* or the *Gas Standards Regulations 2000*. The following amendment to the Proposed Access Arrangement was therefore required under the Draft Decision.

> The Proposed Access Arrangement should be amended so that the terms and conditions for Reference Services include an Operating Specification for gas quality as follows and to apply from the time that the Proposed Access Arrangement comes into effect. (Draft Decision Amendment 15)

Component		**Receipt Points and Delivery Points**
Maximum carbon dioxide (mol %)		4.0
Maximum inert gases (mol %)		7.0
Minimum higher heating value (MJ/m^3)		37.0
Maximum higher heating value (MJ/m^3)		42.3
Minimum Wobbe Index		46.5
Maximum Wobbe Index		51.0
Maximum total sulphur (mg/m^3)	Unodorised	10
	Odorised	20
Maximum Hydrogen Sulphide (mg/m^3)		2
Maximum Oxygen (mol %)		0.2
Maximum Water (mg/m^3)		48
Hydrocarbon dewpoint over the pressure range 2.5 to 8.72 MPa absolute		Below 0 ºC
Maximum radioactive components (Bq/m^3)		600
Minimum extractable LPGs (t/TJ)		0

Submissions on the Draft Decision

550. Consistent with submissions received on the Proposed Access Arrangement, and for the reasons generally set out in paragraph 528 above, a number of gas producers and end-users of gas as a fuel made submissions to the Authority supporting the requirement for a wider gas quality specification under the Terms and Conditions for Reference Services.[84] Also consistent with submissions received on the Proposed Access Arrangement, a number of end-users of gas as a production feedstock opposed the requirement.[85] One end user of gas (Wesfarmers LPG) submitted that different gas specifications should apply upstream and downstream of its LPG plant for the purposes of accommodating the effect of extraction of LPGs on the

[84] Apache Energy, North West Shelf Gas, BHP Billiton, Western Mining Corporation.

[85] CSBP, Wesfarmers LPG.

composition of the gas stream. For the most part, these submissions reiterate views expressed by each party in submissions made prior to the Draft Decision.

551. In submissions to the Authority, DBP has opposed the requirements under Draft Decision Amendment 15 to include a wider gas quality specification in the terms and conditions for Reference Services.

552. In summary, DBP submits that the requirement for the wider gas specification is unreasonable for reasons that:

- the determination of a gas quality specification is properly a matter of government policy and is outside of the role of the Authority;
- the determination by the Authority of a gas quality specification was undertaken without the processes of consultation foreshadowed after the review of the gas quality specification in 1995, and there has been no meaningful cost-benefit analysis undertaken of a widening of the gas quality specification and, in the absence of such analysis, the Authority's requirement for a wider gas quality specification is unreasonable and not in the interests of good public policy;
- in the event of a User contracting for a Reference Service and supplying gas to the DBNGP at the wider specification, DBP may be compromised in its ability to meet contractual obligations in respect of the quality of gas delivered to other Users or DBP's interests under existing contracts may otherwise be compromised;
- the Authority did not adequately recognise the provisions in the proposed terms and conditions for the Tf Service and in the Standard Shipper Contract that establish a process for a change in the gas quality specification, nor the potential for the wider gas quality specification under the Access Arrangement to deprive DBP and Users of rights under the Standard Shipper Contract and in respect of this process;
- the Authority did not adequately recognise that the process established under the Standard Shipper Contract for a change in the gas quality specification was negotiated between DBP and Users and that these arrangements are, *ipso facto*, reasonable;
- the Authority gave undue weight to submissions from Users supporting a widening of the gas quality specification but did not consider that there were no submissions supporting a widening of the specification from Users accounting for the majority of gas deliveries by the DBNGP;
- the wider gas quality specification will reduce the Capacity of the DBNGP resulting in DBP having insufficient Capacity to meet contractual commitments to deliver gas, and will require DBP to incur additional capital and operating costs.

Final Decision

553. In making its Final Decision, the Authority has taken into account the further submissions made by DBP and other parties on the matter of the gas quality specification to be included in the terms and conditions for Reference Services.

554. In regard to the role of the Authority in determining a gas quality specification and the process of any such determination, the Authority acknowledges that it is within the

Government's jurisdiction to determine a gas quality specification for the DBNGP through regulations if it so chooses. The Government has not, however, chosen to make such a determination. A gas quality specification and associated terms and conditions have been proposed by the owner of the DBNGP as an element of the terms and conditions for a Reference Service and the Authority is obliged to consider these terms in its assessment of the Proposed Access Arrangement.

555. The Authority is required by section 3.6 of the Code to consider whether the proposed gas quality specification and associated terms and conditions are reasonable.

556. The Authority acknowledges DBP's submission that the 1995 study of the gas quality specification for the DBNGP contemplated a consultative process being undertaken before a widening of the gas quality specification. However, in considering the gas quality specification as an element of the Access Arrangement, the Authority is obliged to follow the guidance for public consultation set out in section 2 of the Code and to endeavour to complete the assessment of proposed revisions to the Access Arrangement in the time frame set out in the Code. These requirements are inconsistent with conducting consultation to an extent greater than, or in a manner different to, that contemplated by the Code for the purposes of the Authority's assessment of proposed revisions to the Access Arrangement.

557. The Authority has also had regard to the provisions of the existing Access Arrangement which contain a narrower specification than that required in the Draft Decision. The Authority notes that at the time that the existing specifications were approved the then Regulator noted in its Final Decision that the principal limitation on the introduction of a wider gas quality specification to the DBNGP was the contractual obligations of the pipeline owner in respect of the quality of gas delivered to the Wesfarmers LPG plant, giving rise to the minimum LPG content in the gas quality specification. This contractual obligation ended on 1 July 2005 and, at the time of approval of the existing Access Arrangement, the Regulator foreshadowed that the gas quality specification for future Access Arrangement Periods, taking into account opportunities that may arise for widening of the specification, is a matter to which consideration will need to be given at the time the Access Arrangement is reviewed.[86]

558. In regard to the question of whether the gas quality specification proposed by DBP is reasonable, DBP and CSBP have asserted that the fact that the existing gas specification was negotiated between DBP and Users is significant evidence that it is a reasonable balance between the interests of contracting parties.

559. The Authority is of the view that the reasonableness of the proposed gas specification must be determined having regard to the role to be played by the terms and conditions of supply that are set out in the Access Arrangement. That is, the terms and conditions represent standard contract terms on which DBP is required to agree to supply the Reference Service, subject to availability of Capacity. The terms and conditions in the Access Arrangement are brought to account in any arbitration to resolve a dispute concerning the terms of access (section 6.15 of the Code). Accordingly, they also provide guidance as to the appropriate terms and conditions where supply is sought on different terms or of a different Service.

[86] Independent Gas Pipelines Access Regulator, 23 May 2003, Final Decision on the Proposed Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline, paragraph 540.

560. The Authority accepts that, in most cases, an assessment of the reasonableness of the terms and conditions in an Access Arrangement simply requires the Authority to undertake an assessment of the fairness of the terms in balancing the commercial interests of the Service Provider on the one hand and Users and Potential Users on the other. However, an obligation on the part of the Service Provider to provide access to the pipeline for a User wishing to ship gas of a particular gas specification potentially affects the overall operation of the pipeline and the contractual rights of other Users. In this circumstance, the Authority is required to have regard to the factors in section 2.24 of the Code in determining whether the proposed terms relating to gas specification are reasonable.

561. The practice for pipeline operation is to identify a gas quality specification, the individual parameters of which must not be exceeded by any Shipper, in the knowledge that the result will be that the co-mingled gas stream will have a specification on average that is narrower than the standard for the pipeline. It is this average that is used to establish the likely operating costs, capacity constraints and expected gas quality at delivery points. Accordingly, in determining the reasonableness of DBP's proposed gas specification, the Authority must reach a view on the extent to which Users of the DBNGP seek to be able to supply gas to the pipeline that is outside the proposed specification and a view on the likely effect upon gas quality for the co-mingled stream if a broader gas quality specification is included in the Access Arrangement. That is, the Authority must consider the extent to which a change in specification would be likely to actually alter the gas quality in the pipeline and, hence, whether there are likely to be significant consequences for the operating costs and Capacity of the pipeline and the expected gas quality at delivery points.

562. Taking into account the submissions made by DBP and other interested parties, the Authority is of the view that the following matters are relevant considerations under section 2.24 of the Code.

563. Firstly, DBP has submitted that the wider gas quality specification contemplated by the Authority in its Draft Decision would have a real and significant impact on the Capacity of the DBNGP and would result in significant increases in costs incurred by DBP in expanding the Capacity of the pipeline to meet contracted commitments. These matters are relevant under section 2.24(a) of the Code which refers to the Service Provider's legitimate business interests and investment in the Covered Pipeline.

564. DBP has presented an estimate of the reduction in Capacity of the DBNGP that would potentially result from the introduction of the broader gas quality specification required by the Authority under the Draft Decision, this estimate being a not insignificant reduction in the Capacity of the DBNGP. A detailed discussion of DBP's analysis is contained in Confidential Annexure C to this Final Decision.

565. The Authority commissioned a study to examine DBP's claim of a potential reduction in pipeline Capacity. The report on this study[87] was made available for comment by DBP and other parties who made submissions in relation to this issue. The Authority also commissioned a further report to review these submissions[88] and the Authority

[87] PB Associates, August 2005, Dampier to Bunbury Natural Gas Pipeline: Evaluation of the Impact of a Broader Gas Specification.

[88] PB Associates, September 2005, Dampier to Bunbury Natural Gas Pipeline: Evaluation of the Impact of a Broader Gas Specification, Response to Comments made on PB's Report.

has taken account of both the studies and the submissions received in making its Final Decision.

566. DBP's claims of a not insignificant reduction in pipeline Capacity are based on a comparison of an estimate of pipeline Capacity with the "average" gas quality post-July 2005 and an estimate of pipeline Capacity with a gas quality at the minimum bounds of the broader gas quality specification required by the Authority under its Draft Decision.

567. The Authority accepts the correctness of DBP's estimates of pipeline Capacity under the different potential gas quality scenarios, but takes the view that these scenarios are not an appropriate basis for determining the potential impact of the broader gas quality specification on pipeline Capacity. While a broader gas quality specification for the DBNGP may include less stringent limits for a range of gas quality parameters, this does not mean that gas producers would supply gas to the DBNGP at the extremes of the allowable ranges for the entire range of parameters. Rather, the quality of gas supplied to the DBNGP is largely constrained by the quality of gas in the particular gas fields being used for gas supply and gas producers are most likely to seek to take advantage of less stringent limits for only particular gas quality parameters, which may differ between gas producers and gas fields. As such, the gas quality of the co-mingled gas stream in the DBNGP is likely to comprise parameter values that are less close to the limits of the gas quality specification than the most extreme values of the various parameters amongst the individual gas streams to the DBNGP.

568. Further, with respect to two of the scenarios modelled by DBP, DBP has assumed that gas being supplied into the pipeline by existing producers, Apache and NWSG, will be at a specification equivalent to the lowest end of the existing gas operating specification in the Standard Shipper Contract and has concluded that it is possible that the minimum HHV levels required to be supplied by DBP under the Standard Shipper Contracts may not be able to be met if the broader gas specification is introduced. However, the Authority does not accept that there is a reasonable likelihood of these scenarios eventuating during this Access Arrangement Period.[89]

569. Notwithstanding the above, and even if DBP's assumptions were to be accepted, the Authority considers that the appropriate basis for determining the effects of the change in gas quality specification on pipeline Capacity comprise either:

- a theoretical comparison of pipeline Capacity under the minimum standards of gas quality permitted by the current operating specification for the pipeline with the Capacity under the minimum standards of gas quality of the broader gas quality specification required by the Authority in its Draft Decision; or

- a comparison based on the current typical or average gas quality with "new" gas supplied to the broadest gas specification as incremental capacity, or as gas displacing part of gas currently supplied by existing producers.

570. The Authority accepts the correctness of the facts and material on which assumptions have been made in the reports commissioned by it. It also accepts the advice provided to it that, under either of these alternative bases of estimating the effects of the change in gas quality specification on pipeline Capacity, the effect on

[89] Refer to Confidential Annexure C.

Capacity would be a reduction of no more than one per cent, at least during the proposed Access Arrangement Period.[90]

571. The Authority therefore takes the view that the introduction of the broader gas quality specification required by the Authority under its Draft Decision is not likely to have a material impact on the Capacity of the DBNGP at least during the Access Arrangement Period to 2010.

572. In regard to additional costs that may be incurred by DBP as a result of a change in the gas quality specification, DBP has made submissions to the Authority that it is likely to incur operating costs greater than the forecast of Non Capital Costs on which the Proposed Access Arrangement is based. DBP claims that the increases in operating costs arise from both an unexpected reduction in the energy density of gas being transported in the pipeline under existing contracts and within the gas quality specification established by those contracts, as well as a potential change in gas quality in the DBNGP if the Authority requires a broader gas quality specification to be included in the terms and conditions for Reference Services.

573. The Authority accepts that DBP may incur increases in costs due to the proposed changes in gas quality and that the Code allows a Service Provider to recover any such additional costs to the extent they are justified by the Access Arrangement Information. DBP has not, however, made any submission of revised cost forecasts and the Authority is therefore unable to take the contemplated increases in costs into account in assessment of the Proposed Access Arrangement. The Authority notes that DBP cannot rely on its failure to specify such costs as a reason why there should be no change to the gas specification.

574. DBP has submitted to the Authority that it has entered into contracts that do not allow it to recover the costs of expansion of the pipeline to meet existing contractual commitments. The Authority has reviewed the terms of the Standard Shipper Contract relevant to recovery of expansion costs incurred prior to 1 January 2016 and is of the view that, prima facie, clause 20.8 of the contract allows DBP to adjust the base tariff to take into account costs associated with expansion of the pipeline capacity even where such expansion is required only to meet existing contractual obligations. The Authority notes that in any event at the time it negotiated the Standard Shipper Contracts, DBP included provisions addressing the possibility of a change to the gas specification and DBP was aware of the risk of incurring additional costs associated with expansion of the pipeline and expressly addressed the issue in the Standard Shipper Contracts.

575. Secondly, DBP has claimed that in the event of a User contracting for a Reference Service and supplying gas to the DBNGP at the wider specification, DBP may be compromised in its ability to meet contractual obligations in respect of the quality of gas delivered to other Users or DBP's interests under existing contracts may otherwise be compromised.

576. This is a relevant matter for the Authority to consider under section 2.24(b) of the Code, which requires the Authority to take into account firm and binding contractual commitments of the Service Provider or other persons (or both) already using the Covered Pipeline.

[90] PB Associates, August 2005, Dampier to Bunbury Natural Gas Pipeline: Evaluation of the Impact of a Broader Gas Specification.

577. In regard generally to DBP's obligations to deliver certain quantities of gas, the Authority has considered the impact of a broader gas quality specification on the Capacity of the DBNGP and, for the reasons as set out above in paragraph 570, takes the view that, at least for the forthcoming Access Arrangement Period, a broader gas quality specification is unlikely to have a material impact on pipeline Capacity and therefore is unlikely to affect DBP's ability to meet contractual obligations in respect of quantities of gas delivered.

578. In regard to DBP's obligations in respect of delivery of gas of a certain quality, the Authority acknowledges that, with the introduction of a broader gas quality specification for Reference Services as determined by the Authority in its Draft Decision, there is a potential for DBP to be unable to deliver gas at Delivery Points at a quality that meets the requirements of the operating specification under the Standard Shipper Contracts. The Authority has considered DBP's submission in this respect, as described in Confidential Annexure D of this Final Decision and considers, however, that there is no reasonable likelihood of such a situation eventuating during the proposed Access Arrangement Period while most Users of the DBP remain bound by the terms of the Standard Shipper Contracts.

579. Thirdly, under section 2.24(e) of the Code, the Authority is required to take into account the public interest, including the public interest in having competition in markets (whether or not in Australia).

580. In regard to determining whether a widening of the gas quality specification would give rise to a public benefit in gas markets based around the transport of gas in the DBNGP, the Authority acknowledges that there has not been a detailed and definitive study of the costs and benefits of a broader specification.

581. In its Draft Decision, the Authority indicated that a broader specification would be in the public interest taking into account that a broader specification would not affect the use of gas by most gas consumers, that a wider specification would increase the number of possible sources of gas for supply to the DBNGP, and that the effects on pipeline Capacity (and, hence, the costs of gas transmission) would be relatively small. Taking into account that new gas fields (the Gorgon and Macedon fields) may be able to supply gas to the DBNGP for at least Back Haul or Part Haul transmission to end users of gas during the Access Arrangement Period, the Authority maintains the view that a broader gas quality specification is likely to increase competition in the upstream gas market for supply of gas to end users via the DBNGP. Even if these new fields do not commence production of gas into the DBNGP during this Access Arrangement period, the Authority is of the view that the introduction of a broader specification at this time will facilitate the development of these fields in the medium to longer term. The Authority has weighed these public benefits against the possible reduction in pipeline Capacity and increases in costs as a result of a broader gas quality specification and is of the view that, on balance and given the Authority's findings with respect to the absence of evidence of any significant reduction in Capacity or demonstrated increases in costs, the public interest in the potential for increased competition in upstream gas markets outweighs the potential adverse effects.

582. Fourthly, section 2.24(f) of the Code requires the Authority to take into account the interests of Users and Prospective Users.

583. As noted above, several Users of the DBNGP that utilise gas as an energy source have supported a broader gas quality specification and the Authority's Draft Decision in this regard. Some end users of gas as a feedstock have opposed the broader gas

quality specification required under the Draft Decision and/or the lack of different gas specifications for Receipt Points and Delivery Points for reason that this could compromise the performance and profitability of the relevant gas-using businesses. The largest User of the DBNGP and end user of gas transported by the DBNGP (Alcoa) has objected to a broader gas specification being required by the Authority for reason of inconsistency with the Standard Shipper Contract, but not for reasons of consequences for gas use.

584. The Authority accepts that a wider gas quality specification may affect the performance of some facilities that utilise gas as a production feedstock.

- CSBP has submitted that the broader gas quality specification contemplated by the Authority in its Draft Decision would adversely affect the production capacity, process efficiency and/or production costs in the manufacture of ammonia and sodium cyanide, both of which are produced for export markets. CSBP has also submitted that the inclusion of a broader gas quality specification in the terms and conditions for Reference Services may result in the same gas quality specification becoming applicable to existing contracts for gas transmission without a process of a negotiated commercial settlement that is provided for under the Standard Shipper Contract with the result that CSBP may lose opportunity to be compensated for any additional costs incurred as a result of a broadening of the gas quality specification.

- Wesfarmers LPG has submitted that the broader gas quality specification (in particular higher allowable CO_2 concentrations) would increase production costs for LPG. Wesfarmers LPG has also submitted that the identical gas specifications for Receipt Points and Delivery Points contemplated by the Authority in its Draft Decision could compromise the ability of the Wesfarmers LPG plant to extract LPGs. Wesfarmers LPG has claimed that either of these factors could cause its LPG production facility to become uneconomic and close down.

585. Neither CSBP nor Wesfarmers LPG has sought to quantify the costs that they claim may be incurred as a result of the application of the broader gas quality specification.

586. The Authority has considered the submissions from CSBP and Wesfarmers LPG and acknowledges that a broader gas quality specification may give rise to costs for the reasons claimed by these parties. However, the Authority considers that the quality of gas delivered into the pipeline (and, hence, delivered to the CSBP and Wesfarmers LPG facilities) is unlikely to approach the limits of the broader gas quality specification contemplated in the Authority's Draft Decision at least for this Access Arrangement Period and, hence, it is unlikely that the effects claimed by CSBP and Wesfarmers LPG would be as severe as the parties have submitted.

587. Further, since the ending (in July 2005) of contractual obligations of the owner of the DBNGP in respect of the quality of gas delivered to the Wesfarmers LPG plant, the Authority does not consider that there is reason to maintain the different gas quality specifications of Receipt Points and Delivery Points.

588. Taking into account the absence of a material reduction in pipeline Capacity expected to result from the widening of the gas quality specification and taking into account the factors of section 2.24 of the Code, the Authority considers that the interests of gas producers, some Users of the DBNGP and end Users of gas and of the public, particularly in the potential increase in competition in upstream gas markets, should prevail over those of DBP and some other end users of gas. As

such, the Authority takes the view that a wider gas quality specification represents a reasonable balance of interests between Users of the DBNGP, end users of gas and DBP itself, and is in the public interest.

589. Having reached this preliminary view, the Authority is also required to separately consider the extent to which the proposed broader gas specification, if applied, would deprive any person of a contractual right in existence prior to the date the revisions to the Access Arrangement were submitted, other than an Exclusivity Right which arose on or after 30 March 1995.

590. In its submissions to the Authority, DBP has argued that the Authority's required amendment to the broader specification will result in a deprival of pre-existing contractual rights of DBP and Shippers under the Standard Shipper Contracts.

591. In regard to the potential compromise of DBP's ability to meet contractual obligations in respect of the quality of delivered gas, the Authority has had some difficulty in identifying the precise nature of the affected contractual rights contended for by DBP in its submissions.

592. In one submission, DBP appears to submit that the implementation of the broader gas specification would deprive it of the following rights under pre-existing contracts:

- The right to deliver gas at outlet points in accordance with the operating specification under those contracts; and
- The right to provide capacity to meet the existing contracted capacity of all contracts on the pipeline.

593. With respect to these "rights", the Authority is of the view that these are in fact contractual obligations on DBP and the reference in section 2.47 to contractual rights is concerned with benefits conferred on parties by contracts, rather than obligations imposed on such parties.

594. The Authority is also of the view that the terms of section 2.47 only extend to effects on contractual rights that are sufficient to amount to a deprival of the right to the performance of that obligation that is enjoyed by the other party to the contract.

595. Further, if the alleged contractual right is, in substance, a right to constrain the terms of access of other parties (such as a restraint upon the ability of the Service Provider to accept broader specification gas into the pipeline from other Users) then it is an Exclusivity Right that falls outside the protection of section 2.47.

596. Accordingly, the rights of Shippers to receive gas that meets particular specifications under the Standard Shipper Contracts will not fall within the protection of section 2.47 to the extent that those rights expressly limit DBP's ability to supply Services to persons who seek to ship broader specification gas in the DBNGP under the Access Arrangement.

597. With respect to the right to provide capacity to meet existing contracted capacity of all contracts on the pipeline, DBP argue that it is not only effects on rights which can be shown to be absolutely inevitable that the Authority must take into account. Rather, DBP submit that section 2.47 includes consequences that would occur as a matter of probability. CSBP has similarly argued that there is a real risk that the effect of the proposed broader specification will place DBP in a position where it will breach either

its contractual commitments to supply gas of a particular specification at an outlet point or to take broader specification gas at an inlet point.

598. The Authority is of the view that these submissions seek to attribute too broad a construction to section 2.47 which applies only where a provision of the Access Arrangement would "deprive" a person of a pre-existing contractual right. The Authority is not satisfied that the matters referred to would result in the deprival of any person's contractual right.

599. Even if it is assumed, contrary to the view expressed above, that DBP's right to deliver gas of a particular specification is a contractual right within the scope of protection under section 2.47 of the Code, while there would be some potential for gas of the wider specification to be introduced into the pipeline for Part Haul and Back Haul Services, and, hence, affect the blended gas quality in the pipeline, for the reasons set out in paragraphs 565 to 571 above, the Authority does not consider that there is sufficient information to substantiate a claim that the Capacity of the pipeline will be affected to an extent sufficient to compromise DBP's ability to meet contractual obligations to other Users. For the same reasons, the Authority is not satisfied that the effect of the broader specification will be to deprive any existing Users of their rights to receive delivery of gas with a particular specification.

600. CSBP has also argued that it made certain investments in its ammonia and sodium cyanide plants on the basis that the gas specifications for the DBNGP could not be broadened other than by a negotiated commercial arrangement consented to by CSBP and that any broadening of the gas specifications other than on this basis would constitute an interference with CSBP's contractual position. However, the Authority takes the view that the outcome that certain contractual rights to compensation will not be triggered by DBP entering into a contract to supply the Reference Service at the broader specification does not amount to a "deprival" of those contractual rights.[91]

601. The Authority therefore requires the following amendment to the Access Arrangement before the Access Arrangement will be approved.

[91] See also Confidential Annexure E

Final Decision Amendment 14

The Proposed Access Arrangement should be amended so that the terms and conditions for Reference Services include an Operating Specification for gas quality as follows and to apply from the time that the Proposed Access Arrangement comes into effect.

Component		Receipt Points and Delivery Points
Maximum carbon dioxide (mol %)		4.0
Maximum inert gases (mol %)		7.0
Minimum higher heating value (MJ/m^3)		37.0
Maximum higher heating value (MJ/m^3)		42.3
Minimum Wobbe Index		46.5
Maximum Wobbe Index		51.0
Maximum total sulphur (mg/m^3)	Unodorised	10
	Odorised	20
Maximum Hydrogen Sulphide (mg/m^3)		2
Maximum Oxygen (mol %)		0.2
Maximum Water (mg/m^3)		48
Hydrocarbon dewpoint over the pressure range 2.5 to 8.72 MPa absolute		Below 0 ºC
Maximum radioactive components (Bq/m^3)		600
Minimum extractable LPGs (t/TJ)		0

Capacity Management Policy

602. 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.

603. 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.

604. 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.

605. The Current Access Arrangement does not contain a Capacity Management Policy. This was an error of omission in the drafting and approval of the Current Access Arrangement.

606. DBP has not provided a Capacity Management Policy as part of the proposed Access Arrangement, possibly reflecting its omission in the Current Access Arrangement.

607. The Code requires an Access Arrangement to include a Capacity Management Policy. In its Draft Decision, the Authority stated a requirement that the Proposed Access Arrangement be amended to this effect before it will be approved.

> The Proposed Access Arrangement should be amended to include a Capacity Management Policy that indicates that the DBNGP is to be managed as a Contract Carriage Pipeline. (Draft Decision Amendment 16)

608. In a submission made to the Authority subsequent to the Draft Decision, DBP has indicated a willingness to comply with this required amendment.

609. The Authority therefore maintains the requirement for amendment of the Proposed Access Arrangement to include a Capacity Management Policy. The Authority notes that it is implicit in the Current and Proposed Access Arrangement that the DBNGP is intended to be managed as a Contract Carriage Pipeline. A Capacity Management Policy for the DBNGP requires no more than a statement that the DBNGP is to be managed as a Contract Carriage Pipeline.

Final Decision Amendment 15 The Proposed Access Arrangement should be amended to include a Capacity Management Policy that indicates that the DBNGP is to be managed as a Contract Carriage Pipeline.

Trading Policy

610. Section 3.9 of the Code requires that an Access Arrangement for a Covered Pipeline that is described in the Access Arrangement 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**").

611. 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.

612. Section 3.11 of the Code states that examples of things that would be reasonable for the purposes of paragraphs 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.

613. The Trading Policy of the Proposed Access Arrangement contains similar provisions as the Trading Policy of the Current Access Arrangement with the exception that provisions relating to the "Secondary Market Service" of the Current Access Arrangement have been removed.

614. The Trading Policy of the Proposed Access Arrangement provides for the following.

- Bare Transfers of contracted Capacity for the Tf Service or Non-Reference Services in accordance with section 3.10 of the Code.

- Conditional Transfers of contracted Capacity for the Tf Service or Non-Reference Services in accordance with the Access Contract Terms and Conditions. The relevant provision of the Access Contract Terms and Conditions appears to be paragraph 19.2(b):

> 19.2 Assignment by Shipper
>
> …
>
> (b) Subject to Shipper's rights to trade capacity in accordance with the Access Contract, Shipper must not otherwise assign or encumber its right and interest under the Access Contract without obtaining the prior written consent of Operator, which consent shall not be unreasonably withheld.

- Trading of imbalances in accordance with clause 6 of the Access Contract Terms and Conditions. The relevant provision of the Access Contract Terms and Conditions appears to be sub-clause 6.6:

> 19.2 Assignment by Shipper
>
> Shipper may exchange all or part of its accumulated Imbalances with another Shipper, at any time and on terms they may agree, and must give notice in writing of any such exchange to Operator prior to the exchange occurring. On receipt of such written notice Operator shall calculate adjustments in Shipper's accumulated Imbalances to reflect the exchange and notify both shippers of the adjustments by the beginning of the next Day.

- Relocation of Delivery Point MDQ in accordance with clause 3 of the Access Contract Terms and Conditions. The relevant provision of the Access Contract Terms and Conditions appears to be sub-clause 3.10:

> 3.10 Relocation of Delivery Point MDQ
>
> (a) Shipper may by notice in writing to Operator request a relocation of all or any part of its MDQ from an existing Delivery Point to a new delivery point ("Requested Relocation").
>
> (b) After receiving the request under clause 3.10(a), Operator must assess whether the Requested Relocation is commercially and technically feasible (as reasonably determined by Operator).
>
> (c) As soon as practicable after completing its assessment under clause 3.10(b), Operator must give notice in writing to Shipper advising whether the Requested Relocation is approved or not. Operator may make its approval subject to conditions if they are reasonable on commercial and technical grounds (including but not limited to Operational Grounds).
>
> (d) Without limiting clause 3.10(b), Shipper's ability to relocate its Delivery Point MDQ to another delivery point is subject to the rights of Other Shippers with contracted Delivery Point MDQ at that delivery point.
>
> (e) Without limiting clause 3.10(b), in the event Shipper wishes to relocate any part of its Delivery Point MDQ to a delivery point downstream of Shipper's contracted Delivery Point, Shipper acknowledges that the equivalent downstream quantity may be less than the Delivery Point MDQ Shipper seeks to relocate.

615. The Proposed Access Arrangement thus specifies the Trading Policy for the DBNGP by reference to the Access Contract Terms and Conditions for the proposed

Reference Service, the Tf Service. There are two difficulties with this approach to the specification of the Trading Policy.

616. Firstly, the Code does not limit the application of the Trading Policy to Users with contracts for a Reference Service, but rather the Trading Policy should apply to the pipeline and to Services generally. While this may be achieved by cross-references in the Trading Policy to relevant terms and conditions of a Reference Service (thus indicating that the relevant terms and conditions apply as part of the policy to the pipeline and Services generally), this is not clear.

617. Secondly, as indicated in the Draft Decision and in this Final Decision, the Authority will require amendment of the Proposed Access Arrangement to remove the Tf Service as a Reference Service, and include as Reference Services a T1 Service that is of the nature of the full haul Service provided to Users under the Standard Shipper Contract, a Part Haul Service and a Back Haul Service. The Authority will also require amendment of the Proposed Access Arrangement to include terms and conditions for these Reference Services that, to the extent relevant and, except for the provisions relating to gas quality specification, are substantially the same as terms and conditions set out in the Standard Shipper Contract.

618. In this context, the Authority has given attention to the provisions for the trading of Capacity under the Standard Shipper Contract and notes the existence of the following provisions:

- provision under sub-clause 25.3(a) of the Standard Shipper Contract for Users to trade rights and interests in a manner analogous to a Bare Transfer as required to be permitted under section 3.10(a) of the Code;
- provision under sub-clauses 25.3(b) – (d) and clause 25.4 of the Standard Shipper Contract for Users to trade rights and interests in a manner as required to be permitted under section 3.10(b) of the Code;
- provision under clauses 14.1 to 14.9 of the Standard Shipper Contract for Users to change a Receipt Point and/or Delivery Point in a manner as required to be permitted under section 3.10(c) of the Code.

619. Under the Draft Decision, the Authority indicated that, for the Trading Policy of the Access Arrangement to meet the requirements of the Code, the Proposed Access Arrangement needs to be amended to include provisions that are substantially the same as provisions set out in clauses 14.1 – 14.9, 25.3 and 25.4 of the Standard Shipper Contract and that these provisions should apply as a policy for the pipeline and for Services generally and not be limited in application to Reference Services. The following amendment of the Proposed Access Arrangement was indicated to be required.

> The Proposed Access Arrangement should be amended to include, as part of the Trading Policy, provisions that are substantially the same as provisions of clauses 14.1 – 14.9, 25.3 and 25.4 of the Standard Shipper Contract and these provisions should apply as a policy for the pipeline and for Services generally and not be limited in application to Reference Services. (Draft Decision Amendment 17)

620. In a submission made to the Authority subsequent to the Draft Decision, DBP has indicated a willingness to comply with this required amendment. The Authority therefore maintains the requirement under this Final Decision.

Final Decision Amendment 16

The Proposed Access Arrangement should be amended to include, as part of the Trading Policy, provisions that are substantially the same as provisions of clauses 14.1 – 14.9, 25.3 and 25.4 of the Standard Shipper Contract and these provisions should apply as a policy for the pipeline and for Services generally and not be limited in application to Reference Services.

Queuing Policy

621. 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 (and to seek dispute resolution under section 6 of the Code) where the provision of the Service sought by that Prospective User may impede the ability of the Service Provider to provide a Service that is sought or which may be sought by another Prospective User (a "**Queuing Policy**").

622. 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.

623. Section 3.14 of the Code provides that the Authority may 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.

624. DBP has provided a Queuing Policy as clause 5.4 of the Proposed Access Arrangement.

625. The Queuing Policy of the Proposed Access Arrangement is largely the same as that of the Current Access Arrangement, providing for a single queue for all Services (both Reference and Non-Reference Services) and a priority of access in accordance with the time that an "Access Request" is received or deemed to be received by DBP.

626. DBP has made two substantive revisions to the Queuing Policy:

- provisions have been included that make the holding of a position in the queue of an Access Request for a Non-Reference Service contingent upon the completion of negotiation of terms and conditions for the Service, or satisfaction of conditions relating to costs of investigations, within a specified time period (sub-clause 5.4(f) of the Proposed Access Arrangement); and

- the Spot Capacity Service is explicitly excluded from the Queuing Policy (sub-clause 5.4(n) of the Proposed Access Arrangement).

627. The time limits for negotiation of terms and conditions for Non-Reference Services arise under sub-clause 5.4(f) of the Proposed Access Arrangement as follows.

(f) If an Access Request requires the terms and conditions of the Access Contract to be negotiated between Operator and the Prospective Shipper or is subject to conditions,

the Access Request will be entered in the queue with a priority date being the date of receipt of the Access Request by Operator. However, unless:

(i) where Operator notifies Shipper in accordance with section 5.4 of the Code that there is Spare Capacity sufficient to satisfy the Access Request, within 40 Business Days after the date Operator responds to the Prospective Shipper in accordance with section 5.4 of the Code in respect of Access Request; or

(ii) where Operator notifies Shipper in accordance with section 5.4 of the Code that there is not Spare Capacity sufficient to satisfy the Access Request, within 60 Business Days after the date Shipper consents to a plan and allocation of costs for investigations proposed by Operator and referred to in section 5.4 of the Code in respect of Access Request,

either:

(iii) the negotiations are completed and/or the conditions are satisfied; or

(iv) the Prospective Shipper has agreed to amend the Access Request such that it becomes an Access Request for a Reference Service made on the basis of the Access Contract Terms and Conditions,

the Access Request will be removed from the queue and will subsequently be re-entered in the queue with a priority date being the date that negotiations are completed and/or the conditions are, in Operator's opinion, satisfied.

628. In submissions made on the Proposed Access Arrangement, Western Power and CSBP have expressed the view that there is insufficient requirement on DBP to negotiate terms and conditions in good faith, indicating that while sub-clause 5.3(c) of the Proposed Access Arrangement imposes a requirement on a Prospective User to negotiate terms and conditions of a Non-Reference Service in good faith, there is no corresponding requirement on DBP. The same Users also submitted that the time limits for negotiation of terms and conditions should be extended from 40 days for negotiations of terms and conditions and 60 days for satisfaction of conditions for investigations of capacity, to 60 and 80 days, respectively.

629. Clause 5.3(c) of the proposed Access Arrangement, relating to the negotiation of terms and conditions for Non-Reference Services reads as follows:

(c) If an Access Request requires the terms and conditions of the Access Contract to be negotiated between Operator and the Prospective Shipper because the Access Request is:

(i) for a Non-Reference Service; or

(ii) for a Reference Service but the Prospective Shipper has not indicated its acceptance of the Access Contract Terms and Conditions,

the Prospective Shipper must promptly on request by Operator proceed to negotiate in good faith with Operator the terms and conditions on which the Service is to be provided.

630. In the Draft Decision, the Authority concurred with the submissions that this clause imposes an obligation only on the Prospective User to negotiate the terms and conditions of a Non-Reference Service in good faith. The Authority considered that the time limits for negotiation of terms or satisfaction of conditions set out in sub-clause 5.4(f) of the proposed Access Arrangement should be expressly contingent upon both parties negotiating terms and conditions in good faith. In regard to the time limits imposed on negotiations, the Authority considered that such time limits are reasonable only if timing is suspended in the event that a dispute over terms and

conditions of access is referred for arbitration under section 6 of the Code. The following amendment was required under the Draft Decision.

> Sub-clause 5.4(f) of the Proposed Access Arrangement should be amended so that the time limits for negotiation of terms or satisfaction of conditions set out in sub-clause 5.4(f) of the Proposed Access Arrangement should be expressly contingent upon both parties negotiating terms and conditions in good faith, and the timing suspended in the event that a dispute over terms and conditions of access is referred for arbitration under section 6 of the Code. (Draft Decision Amendment 18)

631. In a submission made to the Authority subsequent to the Draft Decision, DBP has opposed this required amendment, but submitted that the concerns of the Authority may be addressed by amending clause 5.4(f) so that the time limits for negotiation are suspended in the event that a dispute over terms and conditions of access is referred for arbitration under section 6 of the Code.

632. The Authority is satisfied that the proposed amendment of clause 5.4(f) addresses the reasons of the Authority in requiring Amendment 18 of the Draft Decision. Accordingly, the Authority requires the following amendment of the Proposed Access Arrangement under this Final Decision.

> Final Decision Amendment 17
>
> Sub-clause 5.4(f) of the Proposed Access Arrangement should be amended so that the time limits for negotiation of terms or satisfaction of conditions set out in sub-clause 5.4(f) of the Proposed Access Arrangement are suspended in the event that a dispute over terms and conditions of access is referred for arbitration under section 6 of the Code.

633. The second substantive change to the Queuing Policy is the explicit exclusion of the Spot Capacity Service from the Queuing Policy (sub-clause 5.4(n) of the Proposed Access Arrangement). The Authority considers that this exclusion is consistent with the nature of a spot service for Capacity where available Capacity is allocated on the basis of price bids rather than a queue.

634. As a general observation on the Queuing Policy, one User of the DBNGP submitted that the Queuing Policy does not provide sufficient detail to allow a Prospective User to understand how priorities for access will be determined across the range of potential Services. The Authority noted in its Draft Decision that sub-clause 5.4(b) of the Proposed Access Arrangement indicates that a single queue will be maintained for access to Reference Services and Non-Reference Services. The Authority maintains the view expressed in its Draft Decision that this clause indicates that the queue is one for Capacity regardless of the Service by which the Capacity would be used. As such, the Authority remains satisfied that the Queuing Policy adequately describes how the Queuing Policy operates in respect of different Services.

635. In the Draft Decision, the Authority addressed a number of matters raised in a submission by Western Power, indicating concerns with the particular provisions of the Queuing Policy, including:

- too broad a discretion for DBP to find that an Access Request does not comply with requirements and therefore to not place the Access Request in the queue;
- a once-only opportunity for a Prospective User to remedy deficiencies of an Access Request;

- the provisions for DBP to deal with Access Requests out of order of the queue are too vague and subject to DBP's exercise of discretion in regard to *material* differences between Access Requests and whether the interests of a Prospective Shipper are *materially* prejudiced; and

- the provisions for an Access Request in a queue to be amended without losing the place in the queue are too subject to DBP's exercise of discretion in regard to whether the amendment to the Access Request is material.

636. Western Power has reiterated these concerns in a submission subsequent to the Draft Decision.

637. The Authority has reviewed the provisions of the Queuing Policy in relation to which Western Power has expressed concerns but takes the view that, when these provisions are considered in the context of provisions of clauses 5.1 and 5.3 of the Proposed Access Arrangement (relating to the submission and assessment of Access Requests and addressed in more detail below, paragraph 664 and following), the interests of the Prospective User are adequately protected by the requirement for DBP to act as a reasonable and prudent pipeline operator. While the Authority is requiring amendment of the Access Arrangement to remove these clauses, this is with the intention that the provisions of these clauses will be included in the Information Package that DBP is required to produce for the DBNGP under provisions of section 5 of the Code. The Authority considers that the interests of the Prospective User in respect of DBP's assessment of Access Requests are adequately protected by the provisions of these clauses (regardless of whether they appear in the Access Arrangement or Information Package) for DBP to act as a reasonable and prudent pipeline operator.

Extensions/Expansions Policy

638. 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.

639. 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.

640. DBP has provided an Extensions/Expansions Policy as clause 5.4 of the Proposed Access Arrangement.

641. The Extensions/Expansions Policy of the Proposed Access Arrangement is largely the same as that of the Current Access Arrangement with the exceptions that:

- provisions of the Current Access Arrangement (clause 12.1) that set out conditions under which the Service Provider would expand the pipeline have been removed; and
- a new provision has been included in the Extensions/Expansions Policy that sets out a number of factors that the Service Provider may have regard to in considering whether to treat an extension or expansion as part of the Covered Pipeline (clause 11.4 of the Proposed Access Arrangement).

642. One User of the DBNGP submitted that the Extensions/Expansions Policy of the Proposed Access Arrangement does not provide sufficient information for a Prospective User to predict:

- whether an expansion or extension may or may not take place;
- if it does take place, will it be treated as part of the Covered Pipeline;
- whether the Prospective User may be required to make a capital contribution; or
- how any such extension or expansion may affect the tariff.[92]

643. The Authority notes that the Extensions/Expansions Policy of the Proposed Access Arrangement addresses these matters, although not in a definitive manner:

- clause 11.1 of the Proposed Access Arrangement indicates that DBP will expand the Capacity of the Pipeline where it considers that the tests of section 6.22 of the Code have been satisfied (which includes that DBP would not be required to fund part or all of the expansion), or otherwise at the discretion of DBP;
- clauses 11.2 and 11.3 provide for DBP to have discretion over whether an extension, expansion or enhancement of the DBNGP becomes part of the Covered Pipeline, but for DBP to advise the Authority where the decision is made for the extension, expansion or enhancement to not become part of the Covered Pipeline;
- clause 11.6 provides for DBP to seek Surcharges or Capital Contributions from Prospective Users in respect of New Facilities Investment subject to this being in accordance with sections 8.23 to 8.26 of the Code; and

[92] Worsley Alumina Pty Ltd.

- clause 11.5 indicates that if an extension, expansion or enhancement of the DBNGP becomes part of the Covered Pipeline, then the Reference Tariff will not be affected before the next Revisions Commencement Date, unless DBP submits revisions to the Access Arrangement.

644. The Authority is of the view that the Code does not require the Extensions/Expansions Policy to be more explicit or definitive on these matters than proposed, and that these provisions therefore meet the requirements of the Code.

Review and Expiry of the Access Arrangement

645. Section 3.17 of the Code sets out the requirements for an Access Arrangement to specify dates for review of the Access Arrangement:

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***).

…

646. In approving the Revisions Submissions Date and Revisions Commencement Date, the Authority must have regard to the objectives for Reference Tariffs and the Reference Tariff Policy in section 8.1 of the Code. In making a decision on an Access Arrangement (or revisions to an Access Arrangement) and, if considered necessary having had regard to the objectives in section 8.1 of the Code, the Authority may, under section 3.17 of the Code:

(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.

647. Section 3.18 of the Code provides for an Access Arrangement Period to be of any length; however, if the Access Arrangement Period is more than five years, the Authority 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 to be 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.

648. Where a mechanism is included in an Access Arrangement pursuant to section 3.18(a) of the Code, the Authority must investigate no less frequently than once every five years whether a review event identified in the mechanism has occurred.

649. Section 12 of the Proposed Access Arrangement makes provision for a Revisions Submission Date of 1 July 2010 and a Revisions Commencement Date of 1 January 2011. If the Proposed Access Arrangement is approved in the second half of 2005, these dates imply an Access Arrangement Period of about five years in length.

650. As the Access Arrangement Period is potentially in excess of five years, the Authority is required under Section 3.18 of the Code to consider whether mechanisms should be included to address the risk of forecasts on which the terms of the Access Arrangement were based and approved are proved to be incorrect.

651. The Authority noted in its Draft Decision that, in the Access Arrangement Information, DBP has provided forecasts of contracted Capacity and throughput for the proposed Access Arrangement Period and no parties raised concerns with these forecasts. Taking this into account, and considering that the proposed Access Arrangement Period may be at most only marginally in excess of five years, the Authority took the view that there was no need for mechanisms as contemplated by section 3.18 of the Code to be included in the Access Arrangement. The Authority maintains this view.

652. The Authority considers that practical experience to date in the assessment of proposed revisions to Access Arrangements indicates that a minimum nine month period is often necessary to undertake an assessment, making sufficient provision for public consultation. In the Draft Decision, the Authority indicated that the Proposed Access Arrangement should be revised so that the Revisions Submission Date should be nine months prior to the Revisions Commencement Date.

Clause 12.1 of the Proposed Access Arrangement should be amended so that the Revisions Submission Date is 1 April 2010. (Draft Decision Amendment 19)

653. In a submission made to the Authority subsequent to the Draft Decision, DBP has indicated a willingness to comply with this required amendment. The Authority therefore maintains the requirement under this Final Decision.

Final Decision Amendment 18

Clause 12.1 of the Proposed Access Arrangement should be amended so that the Revisions Submission Date is 1 April 2010.

Matters Unrelated to Sections 3.1 to 3.20 of the Code

654. Section 2.24 of the Code requires that an Access Arrangement contain the elements and satisfy the principles set out in sections 3.1 to 3.20 of the Code. However, it is open to a Service Provider to address, in an Access Arrangement, matters beyond the requirements set out in those sections of the Code.

655. Pursuant to section 2.24 of the Code, the Authority must not refuse to approve a proposed Access Arrangement solely for the reason that it does not address a matter that sections 3.1 to 3.20 of the Code do not require to be addressed. However, if a proposed Access Arrangement addresses matters in addition to the requirements in sections 3.1 to 3.20 of the Code, then the Authority may consider these matters in its assessment of the proposed Access Arrangement, taking into account the factors listed in section 2.24 of the Code.

656. The Proposed Access Arrangement contains information on a number of matters additional to the elements of an Access Arrangement required by sections 3.1 to 3.20 of the Code. These additional matters include:

- introductory and background information (sections 1, 2 and 3 of the Proposed Access Arrangement);

- specification of the commencement date of the revisions to the Access Arrangement (section 4); and

- the process of making an "Access Request" and of an Access Request being considered and assessed by DBP (section 5).

657. In submissions made to the Authority, a number of parties raised concerns in relation to these additional matters dealt with in the Proposed Access Arrangement. These submissions are addressed as follows.

Introduction and Background

658. Western Power requested in a submission that the Authority give attention to three statements made in the introduction and background to the Proposed Access Arrangement that are potentially contrary to the requirements of the Code:

- the statement in clause 1.3 that "The Access Arrangement sets out the policies and basic terms and conditions applying to third party access …" is misleading by not recognising that the Code requires detailed terms and conditions to be specified for Reference Services;

- the statement in clause 1.5 that "… [if] prospective shippers are unable to conclude negotiations for access, this Access Arrangement contains the terms and conditions for Access to the Reference Service" implies that if negotiations cannot be concluded, that access will only be available on the terms and conditions of the Reference Service and the role of the Arbitrator under section 6 of the Code in determining terms and conditions for other Services is compromised; and

- the provision in section 2.7 for DBP to propose further revisions to the Access Arrangement as a result of any orders made by the Gas Review Board in relation to current appeals against the decision of the Regulator to approve the Current Access Arrangement, which it is submitted is contrary to the role of the Gas Review Board.

659. In regard to the concerns expressed over statements made in clauses 1.3 and 1.5, the Authority noted in its Draft Decision that the statement that "The Access Arrangement sets out the policies and basic terms and conditions applying to third party access …" is taken from the italicised introduction to section 2 of the Code. The Authority indicated in its Draft Decision that it did not consider these provisions as having the restricted meanings attributed to them by Western Power, or that these provisions in any way affect the requirement for the Access Arrangement to comply with the Code or affect the functions of the Arbitrator. The Authority maintains this view.

660. In regard to the process by which orders of the Gas Review Board may be incorporated into the Proposed Access Arrangement, the Authority noted in its Draft Decision that the effect of orders of the Gas Review Board may be to affirm, set aside or vary the Regulator's Decision by which the Current Access Arrangement was approved. The Board does not have jurisdiction in the current appeals before it to make general orders in relation to the current assessment process for revisions to the Access Arrangement, save to the extent that any orders made to set aside or

vary the Current Access Arrangement have a flow-on effect to the current process. The Authority also noted that the Code makes no provision for a Service Provider to amend proposed Revisions to an Access Arrangement once those revisions have been submitted to the Relevant Regulator, save as provided for in sections 2.37A and 2.40 of the Code. However, under section 2.28 of the Code, the Service Provider may at any time submit proposed revisions to the Access Arrangement. As such, the Authority took the view that the provision of section 2.7 of the proposed Access Arrangement has no practical effect and should be removed.

Section 2.7 of the Proposed Access Arrangement, relating to revision of the Proposed Access Arrangement pursuant to a decision by the Gas Review Board, should be deleted. (Draft Decision Amendment 20)

661. In a submission made to the Authority subsequent to the Draft Decision, DBP has indicated a willingness to comply with this required amendment. The Authority therefore maintains the requirement under this Final Decision.

Final Decision Amendment 19

Section 2.7 of the Proposed Access Arrangement, relating to revision of the Proposed Access Arrangement pursuant to a decision by the Gas Review Board, should be deleted.

Commencement

662. Western Power submitted that clauses 4.1 and 4.2 of the Proposed Access Arrangement are unclear as a result of a statement first being made that the revisions to the Access Arrangement have effect on 1 July 2005, but then stating that they have effect on the later of the date of approval of the revisions by the Authority or 1 July 2005. In the Draft Decision, the Authority took the view that clauses 4.1 and 4.2 should be amended to make it clear that the revisions will have effect on the later of the date of approval of the revisions by the Authority or 1 July 2005.

Clauses 4.1 and 4.2 of the Proposed Access Arrangement should be amended to make it clear that the revisions to the Access Arrangement will have effect on the later of the date of approval of the revisions by the Authority or 1 July 2005. (Draft Decision Amendment 21)

663. In a submission made to the Authority subsequent to the Draft Decision, DBP has indicated a willingness to comply with this required amendment. As 1 July 2005 has now passed, the Authority requires the Access Arrangement be amended to refer to the date of approval of revisions by the Authority under this Final Decision.

Final Decision Amendment 20

Clauses 4.1 and 4.2 of the Proposed Access Arrangement should be amended to make it clear that the revisions to the Access Arrangement will have effect on the date of approval of the revisions by the Authority.

Access Requests

664. Clauses 5.1 to 5.3 of the Proposed Access Arrangement set out provisions relating to Access Requests. Clause 5.4 sets out the Queuing Policy, which is dealt with separately in this Final Decision.

665. Western Power has submitted that it has a number of concerns with the process by which Access Requests are made and assessed, which it states is a critical part of the Access Arrangement:

- sub-clause 5.1(b) of the Proposed Access Arrangement makes provision for DBP to require a Prospective User to meet costs incurred by DBP in consultations and investigation prior to an Access Request being submitted, which is not contemplated by the Code and is not limited to costs reasonably incurred;
- sub-clause 5.2(b)(ii), which requires that an Access Request specify a "Commencement Date" for a service that is at least 30 days subsequent to the date the Access Request is submitted, should include provision for an earlier Commencement Date if this can be accommodated by DBP;
- sub-clause 5.2(b)(v)(A) indicates that variations may be proposed to the terms and conditions of the Reference Service, which is inconsistent with section 5.2(c)(ii)(B) which implies that, where variations are made to the Access Contract Terms and Conditions, the Service becomes a Non-Reference Service;
- reference in clause 5.2(b)(v)(B) and (C), to terms and conditions for the Spot Capacity Service is inconsistent with the Code, as under the Code an Access Arrangement may only include terms and conditions for Reference Services;
- provision under clause 5.2(d) for charges payable under an Access Contract to be *adjusted* by an amount equal to the "Prescribed Fee" payable in respect of the related Access Request should be changed to clearly state that the charges payable would be *reduced* in these circumstances;
- the Prescribed Fee to be paid on lodgement of an Access Request (set at $5000) is excessive and should be reduced;
- provision under sub-clause 5.2(f) for DBP to require payment of an additional Prescribed Fee where an Access Request is amended is unreasonable;
- there should be a requirement under clause 5.3 for DBP to act as a reasonable and prudent pipeline operator in assessing and responding to an Access Request;
- the terms of sub-clause 5.3(d), that sets out the process by which DBP may accept an Access Request, is unreasonable as it is not practically possible for parties to enter into an Access Contract by such means;
- sub-clause 5.3(e), relating to the rejection of an Access Request, should include a requirement, in circumstances where an Access Request is rejected, for the Prospective User to be provided with reasons for the rejection in reasonable detail;
- sub-clause 5.3(e)(i), relating to the rejection of an Access Request in circumstances where the Access Request is incomplete or otherwise does not comply with the requirements for an Access Request, should be limited to circumstances where the relevant deficiency of the Access Request is material;
- sub-clause 5.3(e)(iii), relating to the rejection of an Access Request in circumstances where DBP considers that the Prospective User is not capable of meeting its obligations under the Access Contract, is not acceptable but rather

DBP should be obliged to accept the Access Request but given a power to build in reasonable prudential requirements;

- sub-clause 5.3(e)(vii), relating to the rejection of an Access Request in circumstances where the Access Request is a request for substantially the same Service as another Access Request submitted by the Prospective User, is not reasonable; and

- sub-clause 5.3(e)(viii), relating to the rejection of an Access Request in circumstances where DBP does not consider the Access Request to be a bona fide request for access, is open to abuse by DBP.

666. In its Draft Decision, the Authority considered these matters raised by Western Power in the context of whether the process for making an Access Request should be addressed in an Access Arrangement. The Authority noted that the process by which Access Requests are made and assessed is not "a critical part of an Access Arrangement" in so far as it is not a required element of an Access Arrangement under sections 3.1 to 3.20 of the Code. Indeed, the Code contemplates this process being described not as an element of an Access Arrangement, but rather as part of the Information Package required to be made available by a Service Provider under section 5 of the Code. While the Relevant Regulator under the Code has powers to require changes to an Information Package made available by a Service Provider, this is a function of the Relevant Regulator that is separate from the function of assessment and approval of a proposed Access Arrangement or proposed revisions to an Access Arrangement. The Authority expressed concern that there is a real issue as to whether it is appropriate for the Access Arrangement to address issues that the Code expressly contemplates will be dealt with in the Information Package.

667. The Authority also expressed the view in its Draft Decision that there is a risk of conflict between the proposed provisions in the Access Arrangement and the express provisions in sections 5.4 to 5.7 of the Code, which set out the circumstances in which costs of an Access Request may be recovered by a Service Provider. In this regard, section 5.5(c) of the Code identifies the extent of reasonable costs that might be recovered. It is to be inferred, as a result of this specific provision, that otherwise there are not to be charges to recover costs raised by the Service Provider in respect of an Access Request. To the extent that specific provisions of the Proposed Access Arrangement enable additional costs to be recovered, the Authority considered that this would be contrary to the Code. The Code does not prevent the parties from negotiating specific charges for investigations carried out before an Access Request has been submitted, however to deal with such charges in the Access Arrangement would be inconsistent with the express provisions in the Code which appear to the Authority to cover the field of the costs that may be recovered in relation to an Access Request and contemplate that such matters are dealt with in the Information Package.

668. The Authority therefore indicated in its Draft Decision that the Proposed Access Arrangement should be revised to remove provisions relating to the making of Access Requests.

The Proposed Access Arrangement should be amended to remove clauses 5.1 to 5.3. (Draft Decision Amendment 22)

669. In a submission made to the Authority subsequent to the Draft Decision, DBP indicated a willingness to comply with this required amendment, with provisions relating to Access Requests to be addressed in the Information Package rather than

the Access Arrangement, and for consequential changes to be made to the Access Arrangement to refer to the Information Package.

670. However, the Authority is concerned that the amendments proposed by DBP to the Access Arrangement to cross-refer to the Information Package will mean that aspects of the Access Arrangement will be subject to amendment by DBP without requiring the approval of the Authority.

671. The Authority has consequently revised this requirement under this Final Decision.

Final Decision Amendment 21 The Proposed Access Arrangement should be amended to remove those aspects of clauses 5.1 to 5.3 relating to the imposition of costs that may be recovered in relation to an Access Request.

REQUIRED AMENDMENTS

672. Under section 2.38 of the Code, the Authority is required, when issuing a Final Decision that proposes to not approve proposed revisions to an Access Arrangement, to state amendments that would have to be made to the proposed revisions in order for the Authority to approve them. Set out below are the amendments that should be made to the Proposed Access Arrangement in order for the Authority to approve it.

Services Policy

673. The Services Policy of the Proposed Access Arrangement should be amended to remove the Tf Service and to include a Reference Service that is of the nature of the "T1 Service" on the terms and conditions as set out in Appendix 1 of this Final Decision. The minimum contract term for this Service should be two years when it is made available to a Prospective User through the utilisation of Spare Capacity and 15 years when it is made available to a Prospective User through the utilisation of Developable Capacity. (Final Decision Amendment 1)

674. The Proposed Access Arrangement should be amended so that the definition of the term "Spot Transaction Terms and Conditions" explicitly provides for these terms and conditions, other than the key principles and rules for operation of the market, to be negotiated with Users and Prospective Users, with resort to arbitration in the event of a dispute over terms and conditions. (Final Decision Amendment 2)

675. The Services Policy of the Proposed Access Arrangement should be amended to indicate that Non-Reference Services that are in the nature of gas transmission Services will be made available subject to availability of Capacity, and other Non-Reference Services will be made available subject to operational availability, an appropriate definition of which should be included in the Access Arrangement. (Final Decision Amendment 3)

676. The Services Policy of the Proposed Access Arrangement should be amended to include descriptions of all Non-Reference Services. (Final Decision Amendment 4)

677. The Services Policy and Reference Tariff Policy of the Proposed Access Arrangement should be amended as necessary to include a Part Haul Service as a Reference Service. The Part Haul Service should be in the nature of the T1 Service on the terms and conditions set out in Appendix 1 of this Final Decision and should have a minimum contract term of two years when it is made available to a Prospective User through the utilisation of Spare Capacity and 15 years when it is made available to a Prospective User through the utilisation of Developable Capacity. (Final Decision Amendment 5)

678. The Services Policy and Reference Tariff Policy of the Proposed Access Arrangement should be amended as necessary to include a Back Haul Service as a Reference Service. The Back Haul Service should be in the nature of the T1 Service on the terms and conditions set out in Appendix 1 of this Final Decision and should have a minimum contract term of two years when it is made available to a Prospective User through the utilisation of Spare Capacity and 15 years when it is made available to a Prospective User through the utilisation of Developable Capacity. (Final Decision Amendment 6)

Reference Tariff and Reference Tariff Policy

679. The Proposed Access Arrangement should be amended to include a Reference Tariff for the Reference Service that is of the nature of the "T1 Service" on the terms and conditions set out in Appendix 1 of this Final Decision. This Reference Tariff should comprise a Capacity Reservation Charge and a Commodity Charge as follows for the calendar year 2005:

Capacity Reservation Charge: $0.888782/GJ MDQ

Commodity Charge: $0.115028/GJ

For the years 2006 to 2011, values of the Capacity Reservation Charge and Commodity Charge should be determined in accordance with clause 7.11 of the Proposed Access Arrangement.

The Reference Tariff should reflect the following cost parameters (in dollar values of 1 January 2005).

Capital Base (at 31 December 2004)	$1,619.60 million					
New Facilities Investment	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
	13.33	78.94	373.28	319.84	90.50	151.25
Rate of Return	7.24% real pre-tax					
Depreciation	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
	44.19	45.22	47.71	55.30	60.74	62.17
Non Capital Costs	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
	59.45	57.22	77.46	76.31	73.87	74.57

(Draft Decision Amendment 7)

680. The Proposed Access Arrangement should be amended to include a Reference Tariff for Part Haul and Back Haul Services. The charges of this Reference Tariff should

be determined as a proportion of the charges of Reference Tariff for the full haul Reference Service as follows:

$$F \times \frac{D}{1399}$$

where

F is the value of the charge that would apply if the Service were the full haul Reference Service

D is the distance in kilometres of pipeline between the relevant Receipt Point and the relevant Delivery Point.

(Final Decision Amendment 8)

681. Clause 7.12(c) of the Proposed Access Arrangement should be amended so that the share of returns to DBP is calculated as follows.

Year	Share of returns
2011	$S_{2011} = E_{2006} + E_{2007} + E_{2008} + E_{2009}$
2012	$S_{2012} = E_{2007} + E_{2008} + E_{2009}$
2013	$S_{2013} = E_{2008} + E_{2009}$
2014	$S_{2014} = E_{2009}$
2015	$S_{2015} = 0$

(Final Decision Amendment 9)

682. Clause 7.3 of the Proposed Access Arrangement should be amended so as to distinguish between the *ex ante* determination of the Capital Base for the purposes of determining the Reference Tariff (involving consideration of forecast New Facilities Investment considered likely to meet the requirements of section 8.16 of the Code) and the *ex post* determination of the Capital Base at the commencement of the next Access Arrangement Period (involving consideration of actual New Facilities Investment that meets the requirements of section 8.16 of the Code). Clause 7.3 should also be amended to indicate that the values of depreciation applied in determination of the Capital Base for each year after 2000, and until 1 January 2005, are the values of depreciation applied in the determination of Reference Tariffs for the period 2000 to 2005. (Final Decision Amendment 10)

683. The Proposed Access Arrangement should be amended so as to delete sub-clauses 7.6(d) and paragraph 7.13(a)(ii), both relating to the establishment of the methodology for determination of the Rate of Return, and some parameter values in the determination, as Fixed Principles. (Final Decision Amendment 11)

Terms and Conditions

684. The Proposed Access Arrangement should be amended to include terms and conditions for the T1 Service (as a Reference Service) as set out in Appendix 1 of this Final Decision. (Final Decision Amendment 12)

685. The Proposed Access Arrangement should be amended to include terms and conditions for the Part Haul Service and Back Haul Service (as Reference Services) that are as set out in Appendix 1 of this Final Decision. (Final Decision Amendment 13)

686. The Proposed Access Arrangement should be amended so that the terms and conditions for Reference Services include an Operating Specification for gas quality as follows and to apply from the time that the Proposed Access Arrangement comes into effect. (Final Decision Amendment 14)

Component		Receipt Points and Delivery Points
Maximum carbon dioxide (mol %)		4.0
Maximum inert gases (mol %)		7.0
Minimum higher heating value (MJ/m^3)		37.0
Maximum higher heating value (MJ/m^3)		42.3
Minimum Wobbe Index		46.5
Maximum Wobbe Index		51.0
Maximum total sulphur (mg/m^3)	Unodorised	10
	Odorised	20
Maximum Hydrogen Sulphide (mg/m^3)		2
Maximum Oxygen (mol %)		0.2
Maximum Water (mg/m^3)		48
Hydrocarbon dewpoint over the pressure range 2.5 to 8.72 MPa absolute		Below 0 ºC
Maximum radioactive components (Bq/m^3)		600
Minimum extractable LPGs (t/TJ)		0

Capacity Management Policy

687. The Proposed Access Arrangement should be amended to include a Capacity Management Policy that indicates that the DBNGP is to be managed as a Contract Carriage Pipeline. (Final Decision Amendment 15)

Trading Policy

688. The Proposed Access Arrangement should be amended to include, as part of the Trading Policy, provisions that are substantially the same as provisions of clauses 14.1 – 14.9, 25.3 and 25.4 of the Standard Shipper Contract and these provisions should apply as a policy for the pipeline and for Services generally and not be limited in application to Reference Services. (Final Decision Amendment 16)

Queuing Policy

689. Sub-clause 5.4(f) of the Proposed Access Arrangement should be amended so that the time limits for negotiation of terms or satisfaction of conditions set out in sub-clause 5.4(f) of the Proposed Access Arrangement are suspended in the event that a

dispute over terms and conditions of access is referred for arbitration under section 6 of the Code. (Final Decision Amendment 17)

Review and Expiry of the Access Arrangement

690. Clause 12.1 of the Proposed Access Arrangement should be amended so that the Revisions Submission Date is 1 April 2010. (Final Decision Amendment 18)

Matters Unrelated to Sections 3.1 to 3.20 of the Code

691. Section 2.7 of the Proposed Access Arrangement, relating to revision of the Proposed Access Arrangement pursuant to a decision by the Gas Review Board, should be deleted. (Final Decision Amendment 19)

692. Clauses 4.1 and 4.2 of the Proposed Access Arrangement should be amended to make it clear that the revisions to the Access Arrangement will have effect on date of approval of the revisions by the Authority. (Final Decision Amendment 20)

693. The Proposed Access Arrangement should be amended to remove those aspects of clauses 5.1 to 5.3 relating to the imposition of costs that may be recovered in relation to an Access Request. (Final Decision Amendment 21)

Appendix 1

Terms and Conditions for Reference Services

(Note: Appendix 1 has been issued as a separate document)

Appendix 2

Reference Tariff Financial Model

(Note: Appendix 2 has been issued as a separate document)