MOOMBA TO ADELAIDE PIPELINE SYSTEM

PROPOSED ACCESS ARRANGEMENT UNDER THE NATIONAL ACCESS CODE

FINAL DECISION SUBMISSION #4 (FDS4) CODE COMPLIANCE

1 JULY 2002

Epic Energy South Australia Pty Ltd
ABN 54 068 599 815
Level 7
239 Adelaide Terrace
PERTH WA 6000
CONTACT: Anthony Cribb
TELEPHONE: 08 9492 3803
FACSIMILE: 08 9492 3701

1. Introduction

1.1 The Commission released its final decision in relation to the proposed access arrangement for the Moomba to Adelaide Pipeline System ("MAPS") on 12 September 2001.

1.2 The Commission required Epic Energy to make over 50 amendments to the proposed access arrangement before it will be approved. This was the case, notwithstanding the fact that prior to the final decision, Epic Energy had lodged a revised access arrangement containing extensive amendments in response to the Commission's draft decision.

1.3 On 22 January 2002, Epic Energy submitted a further revised access arrangement in response to the final decision. The further revised access arrangement does not incorporate all of the amendments stipulated in the final decision.

1.4 This is because, Epic Energy submits, the final decision (or at the very least, certain amendments contained in it) manifests a failure by the Commission to properly construe the provisions of the Code. As a result, the validity of the final decision must be called in to question.

1.5 The Commission, in its final decision, acknowledges that:

"In considering whether an access arrangement complies with the Code, the regulator must (pursuant to section [2.24] of the Code) take into account:

- *the legitimate business interests and investment of the service provider;*
- *firm and binding contractual obligations of the service provider or other persons (or both) already using the covered pipeline;*
- *the operational and technical requirements necessary for the safe and reliable operation of the covered pipeline;*
- *the economically efficient operation of 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*
- *any other matters that the Commission considers are relevant."*[1]

1.6 For the purposes of this submission, this list of considerations will be referred to as the "section 2.24 factors".

1.7 It is also noted that on pages 170 and 171 of the final decision, the Commission also acknowledges the obligation to take into account the section 2.24 factors, although these are only applied to the extensions/expansions policy.

1.8 However, despite those brief references, the only mention of the Commission's consideration of these factors in the Final Decision is in relation to the extensions/expansions policy. In relation to other aspects of the access

[1] Commission Final Decision – Moomba to Adelaide Access Arrangement, September 2001, pages 4 and 73.

arrangement, or the access arrangement as a whole, there is no consideration of these factors, unlike the detailed discussion of other provisions in the Code.[2]

1.9 Epic Energy contends that the section 2.24 factors are the paramount and overriding factors to be taken into account and balanced by the Commission when assessing an access arrangement. They are to be accorded fundamental significance by the regulator in assessing whether a proposed access arrangement, including a proposed reference tariff, fulfils the principles in sections 3.1 to 3.20 and should be approved.

1.10 While Epic Energy accepts that there are other considerations, factors and principles that a regulator may (and in some cases is required to) take into account when assessing a particular component of an access arrangement[3], the section 2.24 factors are overriding factors that guide the consideration of other considerations, factors and principles when assessing an access arrangement.

1.11 However, one infers from certain sections of the final decision (eg section 1.4 and the consideration of the proposed reference tariff policy in the final decision) and from the nature of a significant number of the amendments contained in the final decision, that the regulator has given lesser or no importance to the section 2.24 factors compared to the other principles, considerations or factors it has referred to in the final decision.

1.12 This inference is drawn from such statements as the one on page 4 of the final decision, where the Commission states that in carrying out its obligation of balancing the interests of users and potential users, "its principal role as a regulator of gas pipelines is to mitigate the effects of market power, where it arises in gas transportation markets. In this role, the [Commission] must consider that the tariffs and terms of service offered by a covered pipeline owner may well differ substantially from what would be offered in a competitive market."[4]

1.13 While the final decision cross references on numerous occasions to more detailed considerations and arguments that were outlined in the draft decision, the draft decision also does not contain a detailed assessment of the section 2.24 factors.

1.14 Furthermore, in relation to the amendments relating to the reference tariff policy and reference tariff, it is difficult to see how the Commission has taken into account the section 2.24 factors in its assessment process. While the Commission states that the Commission "must take into account the matters set out in section 2.24 of the Code in assessing" all matters required to be contained in an access arrangement by virtue of sections 3.4 and 3.5 of the Code[5], nowhere is express consideration given to the section 2.24 factors, whereas express consideration is given to the section 8 principles[6].

[2] See for example section 2.10.3 of the Final Decision which is the Commission's consideration of the Reference Tariff Policy which solely focuses on section 8.1 of the Code.
[3] For example, section 8.1 of the Code lists certain principles that must be taken into account by the Commission when assessing the Reference Tariff Policy of an access arrangement.
[4] ibid, page 5
[5] Ibid, page 73
[6] Ibid, pages 72 - 83

1.15 It is apparent therefore that the Commission has treated the section 8 principles and the requirements in section 8 of the Code as an "exclusive Code within the Code" and that therefore resort has only been had to the principles and objectives in section 8 of the Code, when assessing the service provider's proposed reference tariff and reference tariff policy's level of compliance with section 3.3 - 3.5 of the Code.

1.16 The Commission also appears to have adopted the approach that there is only one possible way of an access arrangement complying with the Code. This demonstrates the inflexible way in which the Code is applied by regulators in general. The role of the Commission (as regulator) however, in assessing an access arrangement, is not solely to impose its view as to what is a compliant access arrangement. Rather it is required of the Commission (as regulator) to accept that there are a variety of ways that an access arrangement can satisfy the principles and elements of the Code and therefore it is simply the role of the Commission to assess what the Service Provider has proposed is reasonable.

1.17 Given the above comments and the general tenet of the final decision, it is apparent that the Commission has misconstrued the Code. Epic Energy contends that the errors of construction then give rise to subsidiary questions of misapplication in at least two respects:

- Firstly, in making certain amendments in the final decision, the Commission has not taken into account relevant factors (ie some of the section 2.24 factors) or has attempted to take into account irrelevant considerations other than the section 2.24 factors.

- Secondly, and in the alternative, if it can be said that the Commission has taken into account considerations other than the section 2.24 factors in reaching the final decision, then the Commission has failed to give due weight to some of the section 2.24 factors in requiring some of the amendments and in its assessment of the access arrangement as a whole – that is the end result of the total Access Arrangement if the final decision amendments are incorporated does not represent a reasonable balance of the section 2.24 factors.

1.18 This submission therefore serves three purposes:

- Firstly it sets out Epic Energy's view as to the proper construction of the Code and the role of the Commission in assessing an access arrangement pursuant to the Code.
- Secondly, it demonstrates how the final decision (or more importantly, certain amendments) is not one that could be reached from a proper application of the Code.
- Thirdly, in relation to the elements of Epic Energy's proposed access arrangement that are the subject of the relevant amendments in the final decision that Epic Energy contends represent a misapplication of the Code, it demonstrates how those elements of Epic Energy's proposed access arrangement are in a form capable of acceptance by the regulator, by reference to the Code requirements for access arrangements (based on Epic Energy's views as to the proper construction of the Code).

1.19 However, it should be noted that, in relation to the second purpose of this submission, this submission is not intended to be an in depth assessment of all issues that would normally be associated with a formal decision by the Commission. It simply highlights where Epic Energy considers that the Commission has failed to properly apply the Code. Given the above, the failure by Epic Energy to respond to a particular amendment in this final decision should not be taken to mean that Epic Energy accepts the particular amendment.

2. Construction of Code

2.1 While the Code is not a prescriptive piece of legislation, it does set out a path that the Commission, as relevant regulator, must take in determining whether to approve a proposed Access Arrangement. It is critical to that determination to understand what it is that the Commission is charged by the Code to undertake in assessing a proposed Access Arrangement.

2.2 Epic Energy has, through the various documents it has filed with the Commission in relation to the proposed Access Arrangement (in its various revisions), endeavoured to set out how the proposed Access Arrangement complies with the Code. However, that has not been done from the perspective of the Commission's approval process. Previous documents filed by Epic Energy have looked at particular sections of the Code in the context of discussing specific aspects of the proposed Access Arrangement.

2.3 Epic Energy has also provided a detailed submission to the Western Australian Independent Gas Pipelines Access Regulator (in relation to the assessment of the access arrangement for the Dampier to Bunbury Natural Gas Pipeline) on the proper construction of the Code[7] ("DBNGP Submission"). While the DBNGP Submission relates to a regulatory approval process for a different asset, it relates to the same regulatory approval process as that referred to in this submission – ie the approval of an access arrangement under the Code. The DBNGP Submission focuses heavily on the proper construction of the Code. Epic Energy therefore submits that the parts of the DBNGP Submission relating to the proper construction of the Code have equal relevance for the purposes of assessing the access arrangement for the MAPS.

2.4 As the Commission is aware, Epic Energy has applied to the Full Court of the Supreme Court of Western Australia for judicial review of the relevant Commission's draft decision on the proposed access arrangement for the Dampier to Bunbury Natural Gas Pipeline ("DBNGP Case"). The grounds contained in the DBNGP Case, inter alia, go to the application of the Code in considering the approval of a proposed access arrangement. Once again, the arguments put forward in the DBNGP Case in relation to the proper construction and application of the Code have equal relevance for the purposes of assessing the proposed access arrangement for the MAPS. The Court heard submissions from relevant parties (including Epic Energy and the relevant regulator) in November 2001 and its judgment is expected to be handed down in the near future.

2.5 Epic Energy had hoped that by now, the Full Court would have delivered its judgment and reasons in the DBNGP Case. As had been discussed with staff of the Commission, Epic Energy considers it more efficient for the Commission to consider the Court's decision and reasoning before proceeding with the next step in the regulatory approval process for the MAPS, rather than to consider Epic Energy's view as to the proper construction of the Code and then to obtain

[7] Epic Energy's Submission to the Western Australian Independent Gas Pipelines Access Commission in relation to its assessment of the access arrangement for the Dampier to Bunbury Natural Gas Pipeline, "Additional Paper 5: Code Compliance", dated 22 March 2001. A copy of the submission is available at www.offgar.wa.gov.au.

its own advice on the merits of Epic Energy's views. However, given that the Commission has indicated its intention to proceed with the next step of the regulatory approval process, Epic Energy is left with no alternative but to make this further submission in order to preserve its rights.

2.6 Epic Energy therefore requests that the Commission exercise its discretion under section 2.15 of the Code to consider this submission for the purpose of assessing the Access Arrangement and also for the purpose of assessing whether the Commission's final decision is consistent with the Code.

3. Role of Commission

3.1 As outlined in the DBNGP Submission[8], fundamentally, the role of the Commission is to determine whether a proposed Access Arrangement should be approved or not approved.

3.2 In determining whether to approve or not approve a proposed Access Arrangement, the Commission is given some direction by section 2.24 of the Code[9]. That section provides:

> "The Relevant Commission may approve a proposed Access Arrangement only if it is satisfied the proposed Access Arrangement contains the elements and satisfies the principles set out in sections 3.1 to 3.20. The Relevant Commission must not refuse to approve a proposed Access Arrangement solely for the reason that the proposed Access Arrangement does not address a matter that sections 3.1 to 3.20 do not require an Access Arrangement to address. In assessing a proposed Access Arrangement, the Relevant Commission must take the following into account:
>
> (a) the Service Provider's legitimate business interests and investment in the Covered Pipeline;
>
> (b) firm and binding contractual obligations of the Service Provider or other persons (or both) already using the Covered Pipeline;
>
> (c) the operational and technical requirements necessary for the safe and reliable operation of the Covered Pipeline;
>
> (d) the economically efficient operation of the Covered Pipeline;
>
> (e) the public interest, including the public interest in having competition in markets (whether or not in Australia);
>
> (f) the interests of Users and Prospective Users;
>
> (g) any other matters that the Relevant Commission considers are relevant." (the "section 2.24 factors")

3.3 Section 2.24 establishes three driving principles with which the Commission must comply:

- The Commission can only approve a proposed Access Arrangement if he is satisfied that each of the applicable elements and each of the principles set out in sections 3.1 to 3.20 (both inclusive) of the Code are included and satisfied, respectively, in the proposed Access Arrangement.

[8] Section 2 of Epic Energy's Submission to the Western Australian Independent Gas Pipelines Access Commission, Additional Paper 5: Code Compliance, dated 22 March 2001

[9] Guidance is also provided in section 2.25 of the Code but that provision is not relevant for the purposes of this paper.

- In addition, the Commission can not require the proposed Access Arrangement to include an element or principle not included in the applicable list in sections 3.1 to 3.20.

- However, in assessing a proposed Access Arrangement the Commission must take into account each of the matters set out in section 2.24(a) to (g) of the Code.

3.4 The first and second principles are relatively "mechanical", in the sense that it is a matter of "ticking off" each of the applicable elements and principles to see that they are covered in the proposed access arrangement. Although two comments need to be made in relation to them:

- In relation to the first principle, the regulator has a discretion as to what must exist before there can be compliance with certain elements and principles but not every element and principle.
- In relation to the second principle, the Commission may think a matter ("additional matter") should be addressed in an access arrangement that is beyond the matters required by sections 3.1 to 3.20. The Commission therefore may require it to be addressed in the access arrangement but it can't refuse the access arrangement merely on account that the additional matter, which the Commission has invoked, is not addressed.

3.5 Section 2.24 of the Code confers a broad discretion on the Commission to approve an access arrangement if the Commission is satisfied that the proposed access arrangement contains the elements and satisfies the principles set out in sections 3.1 to 3.20 of the Code.

3.6 However, the third principle of section 2.24 goes to how the Commission should exercise that discretion. It requires a balancing of the matters set out in section 2.24(a) to (g) (ie the section 2.24 factors) to ensure each is properly dealt with and given appropriate weighting.

3.7 There are two initial broad comments to be made about this third principle in section 2.24.

3.8 In the first place, it bears its ordinary meaning and that is it is addressed to the Commission when considering the entirety of a proposed access arrangement and is not confined to only what one might call the other or additional matters the subject of the second sentence.

3.9 Secondly, it applies to the approval of an access arrangement in its entirety. The legislation therefore obliges the Commission to give them fundamental significance – the section 2.24 factors are in essence paramount considerations or fundamental considerations.

3.10 This interpretation arises both as a matter of the ordinary meaning of the opening words, "in assessing a proposed access arrangement" and also having regard to the nature of the factors which are invoked, which have a generality about them such as would make them applicable to the entirety of an access arrangement.

3.11 The obligation to afford the section 2.24 factors paramount importance is further underlined by the fact that they are factors that the Commission **must** take into account. These are to be distinguished from a list of relevant factors which the regulator **may or should** consider. There are many other provisions in the Code which give the Commission discretion as to whether to consider a particular consideration, factor or principle or not[10].

3.12 A further comment needs to be made about the overriding importance of the section 2.24 factors for the whole process of the assessment of an access arrangement and that relates to the relationship between section 2.24 and the remaining provisions of the Code.

3.13 The Code essentially operates at three levels. Firstly, there are a range of provisions in the Code which are methodological in nature. They describe methods for reviewing or determining or calculating things. Above that level is a set of principles – called principles or objectives. The methods are designed to serve these principles or objectives. However, sitting above the principles or objectives are the section 2.24 factors.

3.14 While it is accepted that the matter of approval of an access arrangement and the matter of the approval of a such elements as a reference tariff contained within an access arrangement are matters for the exercise of discretion by the regulator, in exercising that discretion the regulator must first recognise that the third sentence of section 2.24 is applicable to the whole process. The regulator must consider the factors which it invokes (ie the section 2.24 factors) in the circumstances of this case and must give them fundamental effect so that they drive the process of assessment. The methodologies shouldn't be given the paramount significance which, in relation to particular amendments that are contained in the final decision, is what has occurred.

3.15 The only other relevant limitation on the exercise of the Commission's discretion is that it can not refuse to approve an access arrangement, by reason only of the fact that it does not address a matter which sections 3.1 to 3.20 of the Code do not require an access arrangement to address.

[10] See for example sections 8.1 and 8.10 of the Code.

4. Outcomes of an Access Arrangement

4.1 It is apparent from the final and draft decisions that the Commission, in making its decision (particularly in relation to the setting of the reference tariff and reference tariff policy), has attempted to replicate outcomes that would be derived in a purely theoretical competitive marketplace.

4.2 This is reflected in such comments in the final decision where the Commission states that "its principal role as a regulator of gas pipelines is to mitigate the effects of market power, where it arises in gas transportation markets. In this role, the [Commission] must consider that the tariffs and terms of service offered by a covered pipeline owner may well differ substantially from what would be offered in a competitive market."[11]

4.3 While Epic Energy does not disagree that this is an aspect that needs to be considered, Epic Energy disagrees that it is the "principal role". Epic Energy questions how such an approach is not only consistent with the objectives of the Code but also with the relevant principles of an effective access regime relating to the terms and conditions for access, as set out in clause 6(4)(i) of the Competition Principles Agreement.

4.4 The stated objective of the Code is:

"*to create a uniform national framework for third party access to all gas pipelines that –*

(a) facilitates the development and operation of a national market for natural gas;
(b) prevents abuse of monopoly power; and
(c) promotes a competitive market for natural gas in which customers may choose suppliers, including producers, retailers and traders; and
(d) provides rights of access to natural gas pipelines on conditions that are fair and reasonable for the owners and operators of gas transmission and distribution pipelines and persons wishing to use the services of those pipelines; and
(e) provides for resolution of disputes."

4.5 Clause 6(4)(i) of the Competition Principles Agreement provides that in deciding on the terms and conditions for access, the following should be taken into account:

(i) the owner's legitimate business interests and investment in the facility;
(ii) the costs to the owner of providing access, including any costs of extending the facility but not costs associated with losses arising from increased competition in upstream or downstream markets;
(iii) the economic value to the owner of any additional investment that the person seeking access or the owner has agreed to undertake;

[11] ibid, page 5

(iv) the interests of all persons holding contracts for use of the facility;
(v) firm and binding contractual obligations of the owner or other persons (or both) already using the facility;
(vi) the operational and technical requirements necessary for the safe and reliable operation of the facility;
(vii) the economically efficient operation of the facility; and
(viii) the benefit to the public from having competitive markets.

4.6 By the very consideration and application of these principles, one must only reach the conclusion that the need to mitigate against the effects of an abuse of market power are but one of the considerations that need to be taken into account. The requirement to take into account the other relevant considerations and factors (ie all of the section 2.24 factors) demonstrates how the regulator must achieve an outcome that is fair and reasonable, rather than one that is reflective of a purely theoretical competitive market that generates lowest cost outcomes.

4.7 If these other factors are not considered, then one must question not only whether decision is a proper application of the Code but also whether the Code is an effective access regime.

4.8 As has been stated earlier, the fact that the draft and final decisions do not contain a detailed consideration of these factors, combined with the statements such as the one on page 5 of the final decision, point to these conclusions.

5. Content of an Access Arrangement - Non-tariff matters

5.1 As discussed above, Epic Energy contends that certain amendments contained in the Commission's final decision relating to certain elements of the proposed access arrangement manifest a failure by the Commission to properly construe the Code and as such, is a misapplication of the provisions of the Code relating to the approval of an access arrangement.

5.2 An Access Arrangement must, as a minimum, include the elements set out in sections 3.1 to 3.20 of the Code.

5.3 These required elements include a services policy, a reference tariff, terms and conditions of access, a capacity management policy, a trading policy, a queuing policy, an extensions/expansions policy and a review date.

5.4 Epic Energy's revised access arrangement contained these required elements as follows:

Code Requirement	Section of Access Arrangement
Services Policy	4, 6, 7, 7A
Reference Tariff and Reference Tariff Policy	5
Terms and Conditions	8,9, 11 – 25, 27 – 43
Capacity Management Policy	3
Trading Policy	26
Queuing Policy	10
Extensions/Expansions Policy	10
Review Date	1

5.5 As mentioned above, this submission focuses on those elements of the proposed access arrangement in respect of which Epic Energy believes the Commission has imposed amendments that manifest a misapplication of the Code. In particular, the non tariff elements in issue are:

- Services policy
- Queuing policy
- Terms and conditions of access
- Extensions/expansions policy

5.6 Each of these elements is discussed in turn in detail below by reference to the proposed revised access arrangement (and, where necessary, the proposed access arrangement information document).

Services Policy

5.7 Section 3.1 of the Code requires that an Access Arrangement include a policy on the Service or Services to be offered (ie, a Services Policy). Section 3.2 of the Code requires that a Services Policy comply with the following principles:

- *"The Access Arrangement must include a description of one or more Services that the Service Provider will make available to Users or Prospective Users, including:*

  - *one or more Services that are likely to be sought by a significant part of the market; and*
  - *any Service or Services which in the Commission's opinion should be included in the Services Policy.*

- *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.*

- *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."*

5.8 In assessing whether an Access Arrangement meets the requirements of the Code in respect of a Services Policy, the Commission therefore must:

(a) identify what Service is likely to be sought by a significant part of the market;
(b) determine whether the Services Policy describes such a Service;
(c) consider whether the Services Policy should include any other Service or Services;
(d) ensure that the Services Policy enables Users or Prospective Users to obtain elements of a Service; and
(e) be satisfied that, a User or a Prospective User may obtain a separate Tariff for an element of a Service, if they request it.

5.9 Epic Energy has provided a Services Policy in sections 4, 6, 7 and 7A of the proposed access arrangement. Under this clause, Epic Energy offers:

- to provide a Reference Service to Prospective Users in the form of a firm forward service (FT Service);
- to provide a non reference service in the form of an interruptible service (IT Service); and
- and negotiate with Prospective Users in respect of "non-specified services".

5.10 The Reference Service offered by Epic Energy is a firm service without interruption or curtailment (subject to the terms of the access arrangement) for a minimum contract period of two years.

5.11 It is noted that the Commission has accepted Epic Energy' proposed Services Policy and agrees that it complies with the requirements of the Code in relation to the content of a Services Policy.

5.12 However, the Commission does devote a significant part of the final decision to discussing the capacity of the pipeline system in determining whether additional services should be offered as reference services[12] and it is

[12] see pages 84 to 109 of Final Decision.

appropriate that Epic Energy comment on these sections of the final decision as they are directly relevant to the amendments that the Commission has required in relation to the terms and conditions of service.

5.13 Epic Energy has on several occasions during this regulatory approval process advised the Commission that there is little likelihood, given the capacity secured by existing users under the existing haulage agreements and the terms of these agreements, that it will be able to enter into any applicable contracts for reference services during the term of the proposed access arrangement.

5.14 Epic Energy has already sought to explain to the Commission[13] that the terms and conditions of the existing haulage contracts demand that Epic Energy configure and operate the pipeline in such a way so as to ensure there is a high reliability of supply in respect of these contracted services.

5.15 The resultant effect of this high reliability of supply requirement is that it constrains the overall potential capacity of the pipeline for forward haul services.

5.16 It should also be noted that the existing haulage agreements were entered into with the existing Users by the previous owner of the MAPS – the State of South Australia. When the pipeline was sold, aside from the benefit of that sale passing to the South Australian public, it was a requirement of the sale that the purchaser (Tenneco – now Epic Energy) also assume the rights and obligations under these agreements. Epic Energy therefore has been constrained in its ability to offer any capacity on the pipeline over and above that allowed for under the existing haulage agreements.

5.17 The proposed reference service however, is a different service to that to be provided under the existing haulage agreements. It in fact provides for a higher reliability of supply than under the existing haulage agreements. Epic Energy has already demonstrated in previous submissions to the Commission that the higher the certainty of the service that is required, the lower the probability that Epic Energy will be able to offer services for the total indicative capacity of the pipeline.[14]

5.18 The Commission disagrees however, that the terms and conditions proposed by Epic Energy require it to make firm capacity available with a high degree of reliability.

5.19 Given the above comments, and to ensure that the legitimate business interests of not only the service provider but also the existing users of the MAPS are protected, it is not appropriate for the capacity of the pipeline to be any greater than that proposed by Epic Energy in its proposed access arrangement.

5.20 In addition to the above comment, it is also important to note that the very shippers who have demanded (through submissions made to the Commission as part of the regulatory approval process) a higher reliability of supply for the

[13] Epic Energy submission in response to the Draft Decision dated 10 October 2001, Part C
[14] Epic Energy submission in response to the Draft Decision dated 10 October 2000.

reference service over and above that proposed by Epic Energy in its proposed access arrangement are the existing users under the existing haulage agreements. Epic Energy submits that these users have a vested interest to ensure this for at least two principal reasons:

(1) First, by requiring a high reliability of supply in the reference service and therefore limiting the capacity of the pipeline, this limits the potential for prospective users to access capacity on the pipeline during the term of the access arrangement and therefore preserves the existing user's market share in the downstream markets in which they operate (and in some cases dominate).

(2) Second, it is well accepted by the Commission that the terms and conditions of the access arrangement that are approved by the Commission will act as the benchmark for negotiations currently being undertaken between the Service Provider and existing users for capacity when the existing users' haulage agreements end in or around 2005. By virtue of the South Australian legislation[15], these existing users have the first call on any spare capacity that becomes available, whether during the current access arrangement period or the subsequent one – ie in 2006 (a fact that is recognised by the Commission in requiring amendment FDA 3.36 in the final decision).

5.21 Due to the further restriction on the available capacity for firm services that will result from Epic Energy having to comply with various amendments contained in the final decision and combined with the motives of the existing users to preserve their market dominance in downstream markets (as noted above), it is highly unlikely that prospective users will have access to firm capacity on the pipeline in the current access arrangement period or the subsequent period, without the pipeline capacity being expanded and them being forced to pay a higher price for that incremental capacity (this issue is discussed in more detail later on in the submission).

5.22 While the above scenario will operate to protect the interests of the existing users of the MAPS in future access arrangement periods, it will operate to adversely affect the interests of prospective users (by them being unable to access capacity on the pipeline at tariffs equivalent to those available to users of existing capacity). This will be discussed in more detail later on in this submission.

5.23 Two of the stated objectives of the Code are that regulation (and as a logical consequence therefore, the content of an access arrangement) must enhance the development of the natural gas market and promote competition in markets other than the market for the supply of transmission services. With that in mind, one must question how protecting the interests of the existing users over those of the service provider and prospective users achieves these fundamental objectives of not only the Code but also the principles of an effective access regime under clause 6(4((i) of the Competition Principles Agreement.

[15] Both the Natural Gas Pipelines Access Act (South Australia) 1995 and the Gas Pipelines Access (South Australia) Act 1998.

Terms and Conditions

5.24 Section 3.6 of the Code requires that an Access Arrangement include the terms and conditions on which the Service Provider will supply each Reference Service. The terms and conditions included must, in the Commission's opinion, be "reasonable", having regard to the section 2.24 factors.

5.25 In assessing whether the proposed access arrangement complies with the Code requirements in respect of Terms and Conditions, the Commission must be satisfied that those terms and conditions are reasonable by reference to, among other things, standard industry and commercial practice.

5.26 In considering the reasonableness of the terms and conditions, the Commission must look at the "package" being offered by Epic Energy, not just the individual elements of that package in isolation. This is confirmed by the requirement of the Commission to take into account the section 2.24 factors.

5.27 Epic Energy has provided terms and conditions for the FT Service and the IT Service in clauses 11 – 43 of the proposed access arrangement and the Applicable Contract.

5.28 The terms and conditions contained in the proposed access arrangement are based on those contained in the existing haulage contracts, which as stated previously in this submission, were agreed upon before the pipeline was sold by the State of South Australia.

5.29 The Commission's evaluation of whether or not the terms and conditions of the proposed access arrangement are reasonable is therefore conditioned in the following respects:

- They are terms and conditions that are consistent with standard industry and commercial practice. The fact that these terns and conditions were developed with reference to the terms and conditions contained in existing haulage contracts. Clearly therefore, these are the sorts of provisions one would expect to see in a gas transmission contract. There is no evidence to suggest that those proposed by the Commission are representative of standard industry practice.

- The reasonableness of the provisions must be considered having regard to the matters set out in section 2.24 of the Code.

5.30 Epic Energy has provided the Commission with a separate submission dealing with particular amendments in the final decision that relate to various terms and conditions of access. These arguments go towards detailing how the terms and conditions proposed by Epic Energy are reasonable and comply with the Code whereas the amendments to the final decision do not reflect a proper assessment of all required factors.

5.31 The arguments set out previously in the submission about the Services Policy apply equally in relation to the terms and conditions.

5.32 As a final comment, and one in respect of which Epic Energy made submissions to the Commission prior to the issue of the final decision, the number of amendments reflect a level of micro management that was not envisaged by the gas industry prior to the implementation of the Code.

5.33 In the introduction, the Code states that an Access Arrangement is similar in many respects to an undertaking under Part IIIA of the Trade Practices Act and is designed to allow the owner or operator of the Covered Pipeline to develop its own Tariffs and other terms and conditions under which access will be made available, subject to the requirements of the Code.

5.34 The Code purports to provide sufficient flexibility to provide a basis for commercial negotiation and states:

"The aim of the Code is to provide sufficient prescription so as to reduce substantially the number of likely arbitrations, while at the same time incorporating enough flexibility for the parties to negotiate contracts within an appropriate framework."

5.35 Rather than meet this policy objective, implementation of the Code in the final decision for the MAPS has not achieved the required balance that Epic Energy, and the pipeline industry in general, had been led to believe would be achieved with respect to the application of the Code in general. This is not necessarily a reflection of the inability of the Code to meet its objectives, however it reflects poorly on those regulatory bodies charged with achieving the fair balance implicit in the very wide range of discretions they have been entrusted with under the Code.

5.36 Many of the amendments required in the final decision deal with very specific aspects of the general terms and conditions of access contained in the access arrangement. It is contended that this was never the intent of the Code. The Code merely requires an access arrangement to embody a series of principles and objectives and an access arrangement is to be interpreted accordingly.

5.37 The Commission appears to have approached the question of whether the terms and conditions proposed by Epic Energy are consistent with the principles in the Code as if the question were whether the terms and conditions were, in the opinion of the Commission, "compliant". This is incorrect. The issue of compliance must be determined by applying the principles in section 2.24. If a proposed terms and conditions comply with those factors, the Commission must recommend that the terms and conditions are acceptable. The fact that these same factors (if they were applied by the Commission) may have been dealt with in a fuller, or different way to the way considered ideal by the Commission, should not cause them to be rejected by the Commission.

5.38 Furthermore, the changes to the terms and conditions relating to reliability and indemnity will only go to increase the number of likely access disputes.

5.39 Even if the above interpretation of the Code is not accepted by the Commission, the fact that the terms and conditions proposed by Epic Energy are based on the numerous access agreements already entered into between the service provider and existing customers should be evidence that these terms and conditions are reasonable.

5.40 All of Epic Energy's existing customers are large, informed companies with significant, if not greater market power than the service provider. The nature of the gas transmission industry which the MAPS serves is such that users and potential users of the pipeline are likely to always be large, informed companies.

5.41 It would seem prudent therefore that the terms and conditions of access in these agreements should form the benchmark for terms and conditions of future access arrangements.

Queuing Policy

5.42 Section 3.12 of the Code requires that an Access Arrangement 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) 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*).

5.43 Section 3.13 of the Code sets out the matters which must be included in, and the objectives of, a Queuing Policy. In addition to the matters specified in section 3.13 of the Code, the Commission may require the Queuing Policy to deal with any other matter the Commission thinks fit taking into account the matters listed in section 2.24 of the Code.

5.44 In assessing whether the Queuing Policy in the proposed access arrangement complies with the requirements of the Code, the issues which the Commission are required to consider are whether the proposed Queuing Policy:

> "(a) enables Users and Prospective Users to understand in advance how it operates;
> (b) accommodates the legitimate business interests of Users and Prospective Users to the extent reasonably possible; and
> (c) generates economically efficient outcomes to the extent reasonably possible. "

5.45 Epic Energy proposed a revised Queuing Policy in its letter to the Commission of 29 August 2001. This was in response to an issues paper released by the Commission earlier in the year relating to (among other matters) the queuing policy.

5.46 While the Commission has accepted the proposed Queuing Policy of 29 August 2001 subject to certain amendments being made[16] and Epic Energy has made further amendments in the latest revised access arrangement, Epic Energy seeks to make a number of comments about the consistency of such a policy with the provisions of the Code, in particular whether it will ever encourage the expansion of the capacity of the pipeline. Although it should be noted that these comments apply equally in relation to the consideration of the expansions/extensions policy.

[16] Amendments FDA 3.35 and 3.36 contained in the Final Decision, pages 193 and 194

5.47 Firstly, it should be noted that Epic Energy has provided the relevant regulator in Western Australia with a detailed submission ("second class citizens' submission") in relation to the effect of an access arrangement on future expansions to the capacity of the pipeline[17]. The submission focuses on the fact that all future expansions to the capacity of the pipeline (if any are constructed) will result in a user of the incremental capacity paying a higher tariff than users of the existing capacity of the pipeline and questions whether this is consistent with the provisions of the Code.

5.48 The main points of the second class citizens' submission, which are equally applicable in the case of the MAPS include the following.

5.49 By setting the value of the initial capital base by reference to the current configuration of the pipeline, the Commission requires expansions, and therefore tariffs that need to be levied for that expanded capacity, to be assessed on a case by case basis.

5.50 As is the case with the DBNGP, the next expansion to the capacity of the MAPS will require looping and the marginal cost of that incremental capacity will be greater than the cost of the capacity of the pipeline as it is currently configured. That next stage of expansion is imminent as the existing capacity of the pipeline is almost fully contracted, a fact which is accepted by the Commission.

5.51 However, the Service Provider can not be compelled under the Code to fund any expansion to the capacity of a pipeline.

5.52 A Service Provider will only commit to incur New Facilities Investment and therefore fund the expansion costs if it is economically feasible to do so (as determined by the Service Provider). If it is not economically feasible for the Service Provider to fund the expansion costs, then a prospective user must pay either a surcharge or a capital contribution which would represent the costs over and above those that the Service Provider considers it is economically feasible to fund itself. Either way, this will result in users of the incremental capacity having to pay more for the same service that users of existing capacity have to pay.

5.53 It should be remembered that the objective of the Code is "to establish a framework for third party access to gas pipelines that ….. provides rights of access to covered pipelines on conditions that are fair and reasonable for both Service Providers and Users and provides for resolution of disputes."[18]

5.54 Another objective of the Code is to encourage the development of an integrated pipeline network[19]..

[17] See Epic Energy's submission to the Western Australian Independent Gas Pipelines Access Commission in relation to his assessment of the access arrangement for the DBNGP: "Additional Information Paper DD2: Response to the Existing Shippers submission on Epic Energy's Second Class Citizens' Claim", 5 October 2001.
[18] Introduction to the National Third Party Access Code for Natural Gas Pipeline Systems
[19] Ibid.

5.55 Consistent with these objectives of the Code, the Service Provider has an unfettered discretion under the Code on the issue of whether it should invest further in a covered pipeline. Section 3.16 of the Code provides that the Service Provider can not be compelled to provide in its extensions/expansions policy that it will fund New Facilities, unless it agrees. Furthermore, section 6.22 of the Code also states that a Service Provider can not be compelled by an arbitrator in an access dispute, to fund any part of the expansion of the pipeline.

5.56 However, the final decision will ensure that it is not economically feasible for Epic Energy to fund any further expansions of spare capacity, thus ensuring that the above Code objectives will not be realised. Following are the main reasons:

- The Code only allows a service provider to earn a rate of return on any capital which is required to build the additional capacity that is equivalent to the rate it is able to earn on the capacity of the pipeline as it is currently configured. The range of rates of return that have been allowed by regulators to date when assessing access arrangements under the Code ensure that any tariff that a Service Provider can charge for the incremental capacity – even if a rolled in tariff were allowed – would not allow Epic Energy to meet its internal hurdle rates for a new project.

- Even if the Service Provider were to proceed with an expansion at a particular regulated rate of return, there is no guarantee that that regulated rate of return will remain fixed at each review of an access arrangement. This is because an access arrangement must be reviewed by the regulator in its entirety when it is reviewed[20]. This is an unnecessary risk for a Service Provider, particularly considering that an access arrangement will need to be reviewed at least each five years[21] and a Service Provider normally requires longer than five years to make a project economically feasible even at Epic Energy's own internal hurdle rates.

5.57 To further compound the problem, section 8.16 of the Code can not allow for the reference tariffs to be increased in the circumstances of an expansion to meet new demand.

5.58 Under section 8.16 of the Code, New Facilities Investment can only be added to the capital base in one of three circumstances[22]:

(1) where "the Anticipated Incremental Revenue generated by the New Facility exceeds the New Facilities Investment" – section 8.16(b)(i).
(2) where "the Service Provider and/or Users satisfy the Relevant Commission that the New Facility has system wide benefits that, in the Relevant Commission's opinion, justify the approval of a higher Reference Tariff for all Users" – section 8.16(b)(ii).
(3) where "the New Facility is necessary to maintain the safety, integrity or Contracted Capacity of Services" – section 8.16(b)(iii).

[20] See section 2.28 of the Code.
[21] See section 3.17 of the Code
[22] Section 8.16(b)(i) to (iii) of the Code

5.59 It is appropriate to deal with each of these circumstances separately.

5.60 ***Section 8.16(b)(i)*** – in this circumstance, the Anticipated Incremental Revenue to be generated by the expansion must exceed the capital cost of the expansion. "Anticipated Incremental Revenue" is defined in the Code as follows:

> " the present value (calculated at the Rate of Return) of the reasonably anticipated future revenue from the sale of Services at the Prevailing Tariffs which would not have been generated without the Incremental Capacity, minus the present value (calculated at the Rate of Return) of the best reasonable forecast of the increase in Non Capital Costs directly attributable to the sale of those Services"

5.61 Therefore, the revenue that the Service Provider will be able to earn for the provision of services used on the incremental capacity will be set by reference to the rate of return and the reference tariffs set by the Commission in relation to the original capacity of the pipeline. Clearly, the tariff can not be increased in this instance.[23]

5.62 Section 8.16(b)(ii) – In this circumstance, there is mention that the reference tariffs can be increased, but only if the Commission is satisfied that the expansion will have system wide benefits and that the Commission believes those benefits justify approving a higher Reference Tariff for all Users. Leaving aside the issue of how the Commission's discretion will be exercised (this is discussed below), a service provider will need to make an election on whether to fund any New Facilities Investment, prior to the expansion being built. For the reasons outlined below, neither section 8.16 nor an entire access arrangement can apply to a prospective expansion of capacity.

5.63 However, the Service Provider will not make an election to fund any expansion if it is not economically feasible for him to do so. At the current regulated rates of return, it will not be economically feasible for a Service Provider to fund any part of the expansion of a New Facility. This therefore leaves the situation of the User having to either fund all (or at the very least that part of the costs that the Service Provider deems is not economically feasible to fund itself) or to pay a surcharge to achieve the Service Provider's required return and therefore the User having to pay more for the capacity than users of existing capacity.

5.64 Even if the Service Provider were to elect to fund part or all of the New Facilities Investment, the Service Provider would not be able to ensure that all users were paying uniform tariffs because those with whom an access agreement has already been entered into could not have their terms affected by a revised access arrangement lodged by the Service Provider to include New Facilities Investment in the capital base for the pipeline (assuming that the tariff under the agreement is not tied to the reference tariffs)[24].

[23] To be fair, the 2nd class citizens' submission does not suggest that this head has application in this situation.

[24] See section 2.25 of the Code which provides that no contractual right entered into prior to the lodgment of an access arrangement will be affected by an approved access arrangement.

5.65 The issue arises therefore whether there would be system wide benefits from expansions of the MAPS. This was the subject of much discussion in the Issues Paper released by the Commission prior to the Final Decision.

5.66 Epic Energy finds it interesting that almost all submissions did not support a roll-in approach with increasing tariffs. The most detailed explanation of this opposition came from Origin Energy who said:

"Origin does not believe that any of the criteria listed in section 8.16(b) of the Code would be likely to be satisfied. Condition (i) is clearly stated by Epic not to apply and we see no reason to doubt that assessment. Condition (ii) appears to be aimed at an enhancement that, in addition to providing additional capacity for a new user, provides significant additional security of supply to all users. An example of this might be the addition of a third compressor at a compressor station. In Origin's view, a normal increase by looping or increased compressor power would be unlikely to fulfil that criterion. We do not believe that Condition (iii) applies and we are not aware that additional pipeline development is claimed to be required to maintain safety, integrity or the contracted capacity of services by Epic or any user."[25]

5.67 In dealing with this point , the Commission has commented as follows at pages 174 – 175 of the Final Decision:

"Section 8.16(b)(ii) provides for a roll-in where the service provider and/or users satisfy the regulator that a new facility would result in system wide benefits which would justify higher tariffs for all users. According to Origin, system wide benefit involves enhancing the security of supply, which is unlikely to occur for an expansion of capacity. Users and the service provider have not argued that system wide benefits would be likely to occur. While the Commission has not assessed whether an expansion would result in system wide benefits, on the basis of submissions there is some doubt that it would.

There is no evidence before the Commission that an expansion is required to maintain safety, integrity or the contracted capacity of services (section 8.16(b)(iii) of the Code).

Accordingly, it does not appear that an expansion of the MAPS would be likely to satisfy section 8.16(b) of the Code at this stage."

5.68 ***Section 8.16(b)(iii)*** – given recent decisions by Commissions applying the Code, there will be very few instances where this provision can be utilised. It will be very difficult to justify that the proposed expansions can satisfy this test. Furthermore, for the very same reasons argued above, a differential pricing regime would still arise.

5.69 Even were there an ability for section 8.16 to allow for tariffs to be increased or to encourage the expansion of the pipeline, the drafting of the section is such that there are timing issues which prevent the Service Provider from being able to earn a return on the capital expansion costs only until after the tariff has

[25] Page 2 of letter dated 11 July from Origin Energy Retail Ltd to Commission on the proposed Access Arrangement for the Moomba to Adelaide Pipeline.

been approved by a Commission following the approval of a revised access arrangement. This is a concern to Epic Energy for the following reasons:

(1) While the Code allows a Service Provider to submit a revision to an access arrangement at any time so as to initiate a tariff reset (on the assumption that a tariff reset allowing for an increase in tariffs is possible under the Code and that such tariffs would provide the necessary return on the new investment so as to make it economically feasible for the Service Provider to undertake the expansion) the Code does not allow for the assessment of a revised access arrangement relating to all or any part of a proposed pipeline. This would therefore prevent the assessment of an expansion to part of a pipeline until that expansion has been built and therefore until the expansion capital has been committed by the Service Provider.

(2) To further exacerbate the problem, a Service Provider can only begin to earn a return on the expansion capital after the revised access arrangement has been approved by the Commission. To date the average regulatory approval timetable extends into years rather than the 6 months proposed in the Code. This delay results in a further stranding of the expansion capital for the first few years since it has been committed by the Service Provider.

(3) As already mentioned above, a further problem with the lodgement of a revised access arrangement is that the regulator must review the entire access arrangement. This creates additional uncertainty due to the fact that the existing parameters for the calculation of the total allowable revenue are capable of being altered, not to mention the additional costs that the Service Provider must incur in having the entire access arrangement reviewed.

(4) Section 8.16(a) of the Code only allows the Service Provide to include that amount of the expansion capital 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. As a result, if any part of the expanded capacity is not contracted, the Service Provider runs the risk of not being able to earn a return on any part of the capital to which that capacity relates. This is a real concern given the approach followed by regulators to date in relation to uncontracted capacity. Again this ignores the further risk associated with the tests in section 8.16(b) and the further discretion of the Commission under section 8.16(b)(ii) even if you get over those hurdles.

5.70 It should also be noted that an attempt to allay concerns about differential pricing was made by the Western Australian Independent Gas Pipelines Access Regulator at a public forum on the draft decision for the DBNGP access arrangement, held on 2 August 2001. At the forum, the following comment was made by one of that Regulator's consultants, Dr Challen in an attempt to negate the problems with the differential pricing situation:

"…..if new users are paying more for capacity, that also lifts the value of capacity that is held under existing contracts and which new users may also

purchase through trading of capacity between users. So in effect the existing users who now own capacity of greater value face exactly the same opportunity cost for use of that capacity as new users. So in effect, the economic cost of capacity in that pipeline is actually the same for all users of the nominal tariff that they may be paying."[26]

5.71 Epic Energy contends that this actually exacerbates the problem rather than solves it. In effect, all it ensures is that should a user of existing capacity not require that capacity, it can be traded, and the price for which it could be traded would be equivalent to the cost of incremental capacity. The argument is based on the assumption that there will be differential tariffs in the first place and only then can there be pricing parity – but only at the higher tariffs. This is hardly an ideal outcome consistent with the objectives of the Code, particularly as it only exacerbates the gulf between the two classes of users as the windfall profit the existing shipper earns in that case will serve to lower its average tariff further.

Extensions/Expansions Policy

5.72 Section 3.16 of the Code provides that an Access Arrangement must include a policy (an Extensions/Expansions Policy) which:

> *"(a) sets out the method to be applied to determine whether any extension to, or expansion of the Capacity of, the Covered Pipeline should or should not be treated as part of the Covered Pipeline for any purpose under the Code;*
> *(b) specifies how any extension or expansion which is to be treated as part of the Covered Pipeline will affect Reference Tariffs; and*
> *(c) if the Service Provider agrees to fund New Facilities if certain conditions are met, describes those New Facilities and the conditions on which the Service Provider will fund the New Facilities."*

5.73 The Commission may not require the Extensions/Expansions Policy to state that the Service Provider will fund New Facilities unless the Service Provider agrees.

5.74 It is noted that the Commission, in its assessment of the Extensions / Expansions Policy, has acknowledged the requirement to consider the section 2.24 factors. It is apparent that the Commission has afforded the section 2.24 factors paramount significance but in doing so, it has applied them without due regard for what is required by sections 3.16 and 3.17 or at least has struck the inappropriate balance between the section 2.24 factors.

5.75 Epic Energy's proposed policy is consistent with the Code requirements. Epic Energy has provided an Extensions/Expansions Policy for the MAPS in clause 10 of the proposed access arrangement. The key provisions of the latest version of the Extensions/Expansions Policy are as follows:

(a) Capacity will be enhanced/expanded to meet the gas transportation needs of Prospective Shippers if Epic Energy believes that the tests in

[26] See DBNGP Public Forum Transcript of Proceedings, 2 August 2001, page 17

section 6.22 of the Code are satisfied or if Epic Energy otherwise agrees.

(b) Epic Energy may offer to otherwise construct new facilities to meet the requirements of prospective users and may seek capital contributions or surcharges from prospective users in such events.

(c) An expansion or extension by Epic Energy will not be treated as part of the Covered Pipeline unless Epic Energy elects to the contrary. Epic Energy will give the Commission notice in writing of this election.

5.76 The elements outlined in the preceding subparagraph satisfy section 3.16(a) of the Code.

5.77 The Commission disagrees and has required amendment FDA 3.33 such that any expansion to the capacity of the pipeline will become part of the covered pipeline unless the Commission otherwise agrees.

5.78 As a preliminary comment, it is believed that one of the primary reasons for the Commission requiring this amendment is to ensure that an expansion to the capacity of the pipeline built after the access arrangement was lodged for assessment by the Commission but before the approval of the access arrangement (known as the National Power expansion) forms part of the covered pipeline and is therefore subject to the access arrangement.

5.79 The conclusions which are to be drawn from the general provisions of the Code are as follows:

(1) The starting point is that MAPS as a Covered Pipeline consists only of those elements of the pipeline listed in Schedule A of the Code and recorded in the Public Register.
(2) That extensions or expansions made to MAPS since the date of commencement of the Code form part of the Covered Pipeline if, and only if, the Access Arrangement provides that those extensions or expansions are to be treated as part of the Covered Pipeline.
(3) Consequently, given that there is no approved Access Arrangement at present in relation to MAPS, currently the extensions or expansions to MAPS undertaken since the commencement of the Code can not form part of the Covered Pipeline.
(4) Furthermore, even if the access arrangement were to provide that expansions were to form part of the covered pipeline, it could not apply to those carried out after the access arrangement were lodged but before it was approved due to the fact that an access arrangement can not have retrospective effect.

5.80 Based on the above premise, and for the reasons detailed below (in addition to those set out in Epic Energy submission to the Commission of 29 August 2001), the Commission is not entitled to impose amendment FDA 3.33 as a condition of approving the Access Arrangement or as a reason for withholding approval of the Access Arrangement.

5.81 In effect the Commission suggests that it may impose, as a condition of approval of an Access Arrangement for a Covered Pipeline, a requirement that another pipeline or another part of the same pipeline (that would not otherwise constitute a Covered Pipeline) be treated as a Covered Pipeline.

5.82 In essence the Commission seeks to compel what the Code otherwise makes a voluntary process – namely that where a pipeline or part of a pipeline is not covered a Service Provider may voluntarily propose an Access Arrangement to the Relevant Commission for approval.

5.83 In Epic Energy's view the manner in which the Commission has sought to exercise its approval powers in relation to this aspect of the Access Arrangement:

- involves the imposition of a condition which is inconsistent with Section 3 of the Code and therefore cannot lawfully be imposed; and
- is therefore outside of the scope of discretion available to the Commission to withhold approval of the Access Arrangement.

5.84 It is implicit from the overview of section 3 of the Code that there must be a choice whether an extension or expansion to the Covered Pipeline is to be treated as part of the Covered Pipeline.

5.85 The most the Commission can require of Epic Energy is that its Access Arrangement address the topic referred to in section 3.16. That is to say the Access Arrangement must contain an Extensions/Expansion Policy. It cannot require Epic Energy to adopt the particular policy in the Access Arrangement that extensions to or expansions of the Covered Pipeline must be treated as part of the Covered Pipeline.

5.86 It is implicit in section 3.16(a) that a choice of policy must be open to the Service Provider. The proposed access arrangement provides as such.

5.87 Even if the above argument is disregarded, the Commission's principal reason for arguing why a proper consideration of the section 2.24 factors requires the amendment to be made is that Epic Energy could exercise a significant degree of market power in setting the terms and conditions for an expansion.

5.88 Epic Energy however submits that this argument demonstrates a lack of understanding of the Code and Epic Energy's commercial interests. It also fails to properly reflect the state of the market in South Australia.

5.89 The Commission contends that in the context of South Australia, alternative fuel sources are in the main prohibitively expensive and that owing to the excess demand that is present in the market, Epic Energy may be in a position to extract monopoly rents.

5.90 Epic Energy disagrees with this reasoning. For a start, there are significant proposals on foot to introduce competitive alternative fuel sources into the South Australian market. Two such examples are the proposed Victorian/South Australian gas pipeline (for which there are 2 project proponents) and the proposed NSW/SA Electricity Interconnector. As such, Epic Energy is not in a position to exercise any undue market power.

5.91 As stated earlier in this submission, a service provider under the Code can not be compelled to fund the expansion or extension of a covered pipeline.

Furthermore, Epic Energy is solely a pipeline transmission company and therefore it is in its interest to maximise the capacity of its pipeline.

5.92 The current market circumstances clearly show that there is a real risk that the MAPS is at a significant risk of partial stranding as a result of other proposed infrastructure projects supplying gas and alternative energy sources. This has been demonstrated by Epic Energy in a separate confidential submission to the Commission. The fact that there is a significant risk of partial stranding further limits whatever ability Epic Energy' had to exercise market power.

5.93 But even if Epic Energy were in a position to exercise undue market power (which Epic Energy contends it is not), there are already provisions in the Code which enable a pipeline (or part of a pipeline) to be covered. The risk of coverage should be a sufficient tension alone to ensure that Epic Energy does not unfairly exercise any market power it may have. In addition, that process is run by a regulator separate to the Commission. It is therefore appropriate that issues of coverage be dealt with by the appropriate regulator and not the Commission by way of enforcing changes to the provisions of the access arrangement.

6. Content of an Access Arrangement - Reference Tariff and Reference Tariff Policy

6.1 Section 3.3 of the Code provides that an Access Arrangement must include a Reference Tariff for:

- at least one Service that is likely to be sought by a significant part of the market; and
- each Service that is likely to be sought by a significant part of the market and for which the Commission considers a Reference Tariff should be included.

6.2 Section 3.4 of the Code provides that an Access Arrangement and any Reference Tariff included in an Access Arrangement must, in the Commission's opinion, comply with the Reference Tariff Principles described in section 8.

6.3 Further, the principles that are to be used to determine the Reference Tariff must be set out in a Reference Tariff Policy and that policy must also comply with the Reference Tariff Principles described in section 8, after a proper consideration of the section 2.24 factors.

6.4 The above sections require the Commission, in assessing an Access Arrangement, to:

(a) identify what Services are likely to be sought by a significant part of the market;
(b) determine if a Reference Tariff has been included for such a Service;
(c) consider whether any additional Reference Tariffs for other Services which satisfy the criteria in subparagraph (a) above, should be included in the Access Arrangement; and
(d) be satisfied that the Access Arrangement, the Reference Tariff and Reference Tariff Policy all comply with the Reference Tariff Principles described in section 8, subject of course to the overriding section 2.24 factors.

6.5 On the proper construction of the Code therefore, the section 2.24 factors are to be accorded fundamental significance or weight as fundamental elements of the assessment for approval process, and they inform and affect the true construction of section 8 of the Code which contains the principles governing reference tariff which are invoked through sections 3.3 and 3.4.

6.6 It should be noted that Epic Energy does not take issue with the approach of the Commission to the first step in this process (ie identifying the services that are likely to be sought by a significant part of the market), subject of course to the comments referred to earlier in this Submission.

6.7 Before commenting on specific aspects of the Reference Tariff Policy proposed by Epic Energy and the Commission's relevant required amendments, as a general comment in relation to the Reference Tariff Policy, it is critical to note that the parameters that are required to be set go to the very heart of affecting the service provider's legitimate business interests and investment in the covered pipeline.

6.8 The values of these parameters that are to be approved by the Commission will therefore have a significant impact on the service provider's legitimate business interests and investment in the pipeline, not only for the duration of the access arrangement period but also, in respect of for example, the Initial Capital Base, subsequent periods.

6.9 Issues surrounding the necessary balance between effective regulated outcomes and investor confidence have been the subject of very wide public debate over recent months, with many of the issues under consideration by the Productivity Commission in its current independent review of the National Access Regime and the Independent panel appointed by the CoAG to conduct a review of National Energy Markets.

6.10 The Productivity Commission, in its Position Paper released in March 2001, sums up the situation very succinctly as follows:

"Access regulation itself is not without costs. Paramount among these is the potential for it to deter investment in essential infrastructure. Any such impacts are cause for concern. This is because the costs of failing to invest in essential infrastructure are likely to be larger than the costs of monopoly pricing of the services it provides. Hence, it is crucial that access regulation gives proper regard to incentives to invest."

6.11 Clause 5 of the proposed access arrangement contains the Reference Tariff Policy. The Reference Tariff structure is also set out in clause 5, and all charges that relate to the provision of the Reference Service are contained in Schedule 4 of the proposed access arrangement.

6.12 It is also noted that the Commission accepts that Epic Energy has included a Reference Tariff in the proposed access arrangement which complies with section 3.3 of the Code. The issue of whether the Reference Tariff, Reference Tariff Policy and the proposed access arrangement comply with the principles described in section 8 of the Code is discussed below.

Objectives of the Reference Tariff and Reference Tariff Policy

6.13 Section 8 of the Code sets out the Reference Tariff Principles which are designed to ensure that certain key principles are reflected in the Reference Tariff Policy and in the calculation of all Reference Tariffs as contemplated by section 3.5 of the Code. However, as stated in the overview to section 8 of the Code (which may be used in interpreting the Code: see section 10.5 of the Code), the Reference Tariff Principles are designed to provide a high degree of flexibility so that the Reference Tariff Policy can meet the circumstances of a particular pipeline system. The principles are not directory, nor prescriptive in their application, but instead provide parameters of discretion for the Commission. It is therefore not surprising that the overview states that:

> *"The Reference Tariff Principles are merely designed to ensure that certain key principles are reflected in the Reference Tariff Policy and in the calculation of the Reference Tariffs."*

6.14 The objectives which a Reference Tariff and Reference Tariff Policy "should be designed with a view to achieving" are set out in section 8.1 of the Code. Materially, they should:

(a) 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;
(b) replicate the outcome of a competitive market;
(c) ensure the safe and reliable operation of the Pipeline;
(d) not distort investments decisions in Pipeline transportation systems or in upstream or downstream industries;
(e) create efficiency in the level and structure of the Reference Tariff; and
(f) provide an incentive to the Service Provider to reduce costs and to develop the market for Reference and other Services.

6.15 In Epic Energy's view, the combination of the words "should" and "with a view to" in section 8.1 of the Code emphasises the broad discretion that a Service Provider has in establishing, and the Commission has in reviewing, a proposed Reference Tariff and Reference Tariff Policy.

6.16 In this regard, the Code contemplates that the relative importance of the objectives in section 8.1 of the Code will vary according to the particular circumstances of a pipeline. To the extent that any of these objectives conflict in their application to a particular Reference Tariff determination, the Commission has a discretion under section 8.1 to determine the manner in which they can be reconciled or which should prevail. However, it is clear that the manner in which this discretion may be exercised, is governed by the overarching principles identified in section 2.24 of the Code (ie the section 2.24 factors)

6.17 The position may be contrasted with section 8.2 of the Code which provides that in deciding whether to approve a Reference Tariff and Reference Tariff Policy, the Commission *must* be satisfied that:

(a) the Total Revenue generated over the Access Arrangement Period should be consistent with the principles and according to one of the methodologies in section 8;
(b) if the Pipeline is used to provide more than one Service, the portion of Total Revenue that a Reference Tariff is designed to recover (which may be based on forecasts) is calculated consistently with the principles in section 8;
(c) the Reference Tariff (which may be based on forecasts) is designed so that the portion of Total Revenue to be recovered from a Reference Service is recovered from Users of that Reference Service consistently with the principles in section 8;
(d) Incentive Mechanisms are incorporated into the Reference Tariff Policy wherever the Commission considers appropriate and those Incentive Mechanisms are consistent with the principles contained in section 8; and
(e) any forecasts required in setting the Reference Tariff represent best estimates arrived at on a reasonable basis.

6.18 However, even these elements involve the Commission forming a view as to whether particular aspects of the proposed Access Arrangement are "consistent with" the Reference Tariff Principles, rather than requiring strict compliance with a statutory matrix.

Total Revenue

6.19 The Code provides a general procedure for the determination of Total Revenue. Section 8.4 of the Code provides that the Total Revenue (being the revenue stream delivered in the Access Arrangement Period) *should* be calculated according to one of three methodologies (Cost of Service, IRR or NPV), the content of which are set out at section 8.4 of the Code.

6.20 The use of the term "should" provides scope for use of alternative methodologies to calculate the Total Revenue. Section 8.5 of the Code supports this conclusion as it allows a Service Provider to use other methods to determine the Total Revenue, provided that the resulting Total Revenue may be expressed in terms of one of the three methodologies described in section 8.4 of the Code.

6.21 As stated in clause 5.2(a)(i) of the proposed access arrangement, the Total Revenue in the proposed access arrangement has been calculated using a Cost of Service method. This is consistent with section 8.4 of the Code. The way in which the Cost of Service methodology applies is demonstrated below.

6.22 The only mandatory obligation which the Commission must consider in relation to the determination of the Total Revenue is whether section 8.2(a) of the Code has been satisfied. Section 8.2(a) requires that the Total Revenue generated for the Access Arrangement Period should be established consistently with the principles and according to one of the methodologies in section 8 of the Code. It is therefore sufficient for the purposes of section 8.2(a) of the Code, if Epic Energy has calculated its Total Revenue in accordance with either section 8.4 or 8.5 of the Code.

Cost of Service methodology

6.23 Under the Cost of Service methodology in section 8.4 of the Code, the Total Revenue is equal to the cost of providing all Services (some of which may be the forecast of such costs), calculated by reference to:

(a) a return (Rate of Return) on the value of the capital assets that form the MAPS (Capital Base);
(b) depreciation of the Capital Base (Depreciation); and
(c) the operating, maintenance and other non-capital costs incurred in providing all Services provided by the Covered Pipeline (Non-Capital Costs).

6.24 The manner in which these elements are employed in determining Total Revenue is not fixed in the sense that there is no prescribed formula or methodology. The key issue is whether the Total Revenue has been calculated in accordance with "generally accepted industry practice", as required by section 8.4. This may vary according to the circumstances of the pipeline in question.

6.25 As outlined above, the Code is non-prescriptive as to how the Total Revenue is to be determined. It merely states that it should be according to one of the methodologies in section 8. As a corollary to this, the Code is flexible as to how the Cost of Service methodology may be applied.

6.26 Set out below, is Epic Energy's analysis of how the Cost of Service methodology has been used to determine the Total Revenue for the MAPS.

Initial Capital Base

6.27 Section 8.10 of the Code sets out the factors which should be considered in establishing the initial Capital Base for an existing Covered Pipeline when a Reference Tariff is first proposed for a Reference Service - as is the case here. These principles are discussed in more detail below.

6.28 The diverse nature of the factors which the Commission should consider under section 8.10 of the Code are likely to result in a broad range of values being established for the initial Capital Base. The only guidance provided in the Code as to the "normal" range of values for the initial Capital Base is section 8.11 of the Code. It is not submitted in this instance that the initial Capital Base should fall outside this "normal" range.

6.29 Epic Energy's determination of the initial Capital Base is outlined in clauses 5.2(a)(i) to (vi) of the proposed access arrangement and section 3.1 of the proposed access arrangement information document. In short, the position may be summarised as follows:

(a) Epic Energy's initial Capital Base for the pipeline system (excluding the expansion to the capacity of the pipeline carried out in 2001 ("ANP Expansion") has been calculated using a depreciated optimised replacement cost ("DORC") methodology.
(b) The optimised replacement cost ("ORC") value of the pipeline lies in the range of $590 million to $620 million (June 2000 dollars), although if the full impact of exchange rate variations were to be taken into account, the valuation would increase by a further minimum $55 million.
(c) In order to depreciate the ORC value, the pipeline system was depreciated as a whole and uniformly over the life of the system, consistent with its current practice and forecast expenditure in accordance with its actual operations.
(d) This resulted in a DORC valuation of $372 million (in December 1998 dollars).
(e) There is no redundant capital.
(f) The Capital Base was increased by the forecasted capital expenditures required to enable Epic Energy to implement the proposed reference service and to enable it to maintain the safety, integrity and reliability of currently contracted capacity in the pipeline system.

6.30 The Commission has also used the DORC methodology to determine the initial Capital Base of the pipeline system[27]. The value that the Commission arrived

[27] Section 2.2.7 of the Final Decision, pages 23 and 24. Although it should be noted that the Commission's definition of the pipeline system has a capacity that is 25TJ/day greater than as

at is $353.3 million (in 30 June 2001 dollars). However this is based on a pipeline system with a capacity of 418 TJ/day (as opposed to 393 TJ/day proposed by Epic Energy).

6.31 In developing its approach to estimating the optimised replacement cost of the pipeline installation Epic:

- undertook a rigorous analysis of the pipeline hydraulics to determine an appropriate physical design and;
- allocated costs against the designs at "all in" unit rates based on Epic's understanding of the total pipeline development cost current at the time of the estimate.

6.32 While the use of "all in" costs is a somewhat simplistic approach to cost estimating for a large project, it is also well recognised in the industry as a sound basis for establishing a reasonable cost estimate. It is noted that the Commission does not require the proponent to undertake a detailed project budget level estimate to establish the project capital base.

6.33 Alternative methods, including the "all in" approach are appropriate when the source of the "all in" data is from projects located in similar topography, of similar size, and relevant in time.

6.34 The intent of the Epic Energy approach was to establish a robust comparative cost estimating basis that would identify an optimum engineering solution at a reasonably high level, while still providing a capital cost base that would withstand reasonable scrutiny at that same level.

6.35 However, as a result of the Commission's final decision, there remains a difference of opinion between Epic Energy and the Commission on the validity of the Epic estimate.

6.36 Epic Energy contends that the estimated optimised replacement cost for the pipeline as contained in the final decision does not reflect today's project market conditions.

6.37 The Commission's estimate is considered to be at the low end of the range of costs for a new pipeline project. This is largely a result of an insufficient allowance for the costs that are not included in the unit materials and construction costs adopted by the ACCC, and the absence of a significant contingency to account for these omissions.

6.38 Because the cost items identified in the Commission's estimate typically account for a large percentage of the capital cost of a pipeline project, there is a tendency to assume that the allowance provides for the numerous smaller cost items that are not part of the assumed unit costs (that is, there is no provision for omissions from the estimate).

6.39 A Commission spreadsheet provided for review summarising its view of the Epic Energy ORC did not include any contingency for omissions. This appears

---

defined by Epic Energy. This is due to the Commission requiring the inclusion of the capacity created by the ANP expansion into the definition of the pipeline system.

to be consistent with the Commission's treatment of the capital cost estimate prepared for the EAPL Moomba to Sydney ORC, where the contingency provided for omissions was deleted.

6.40 Epic Energy considers that it is wrong for any estimate to omit an allowance (contingency) for omissions. This amount is separate from any allowance that might be applied by a developer to establish a project financing budget and/or to cover for the level of reliability of an estimate.

6.41 Current market conditions for major pipeline projects reflect increasing rather than reducing costs. Factors that influence these costs include:

- Increasing compliance costs throughout the whole industry sector, including project approvals, environmental approvals, regulatory approvals and compliance, documentation and records, training, safety, cultural heritage and native title issues to name a few.
- Increasing costs associated with a rigorous risk based design approach that improves design safety, but introduces additional costs through the design and documentation process, and which may increase the cost of the pipeline structure. In particular the design must protect the pipeline from external interference, and the design must manage the risk from the pipeline to levels that are acceptable to the community. These requirements do impact on the design, and do increase the cost of a pipeline, in all locations and particularly in those areas where the pipeline passes through built up areas.
- Increased costs associated with the pipeline developer and his supporting financial institutions seeking to obtain a completion cost guarantee.
- The absence of any new technology that could reduce materials or construction costs, associated with decisions to increase the quality of some items, (for example external coating) so as to reduce future maintenance costs.
- There are few Australian based pipeline construction companies with the capacity to build a project of this size without international partners. The costs associated with establishing joint ventures, and mobilising staff and equipment from overseas are significant.

6.42 It is probable that if the project was re-estimated today at a detailed level taking these factors into account, the overall project cost would be increased compared with the current Epic estimate.

6.43 Even without these additional "external" requirements, studies have shown that any savings in costs that may be gained from improvements in technology over time will be negligible in respect of on shore pipelines. While significant savings were made in the early years of construction of on shore pipelines, studies have shown these savings to have plateaued over time.

6.44 The estimates prepared by Epic Energy are considered to provide a reasonable basis for valuing the ORC of the Moomba to Adelaide pipeline network because the Epic estimate is supported by actual costs of constructing like pipeline projects, and like pipeline facilities.

6.45 Because of this, the "all in" estimate basis used by Epic Energy captures all actual project costs, and should be able to be used with a minimal contingency.

6.46 Epic Energy's Ballera – Wallumbilla pipeline, (whose length and design and the terrain over which it is constructed is similar to the MAPS) cost $20,200 per inch per km in 1996 dollars.

6.47 Furthermore:

- It should be noted that the "all in" estimating approach does not take account of the impact of size on the estimated cost. Larger diameter pipelines typically cost more than smaller diameters because larger machinery is required, increased excavation is required, transport costs increase, and construction rates decrease. Some USA research has suggested that the unit costs for a DN 550 pipeline are 21% higher than those of a DN 350 pipeline. This suggests that simple application of existing costs for a DN 350 pipeline might understate the cost of a DN 550 pipeline.
- It is noted that the Commission's draft decision for the EAPL Moomba to Wilton pipeline values the ORC of that pipeline at $748.7 million (in 1999 dollars), or an "all in" cost of $30,170 per inch km (including development and owner's costs). This pipeline is a similar design (DN600, Class 900, 1034 km long compared with the Epic Energy 780 km DN 550 Class 900 MAPS). The pipeline portion of that cost is $21,750 per inch km excluding financing, owner's costs and contingency, and allowing for the use of X70 rather than X80 grade steel to make it comparable with the Epic Energy design.

6.48 Both these factors suggest that the value of $22,000 per inch km in 2000 dollars is a reasonable basis for developing a proper valuation of the capital cost of the pipeline.

6.49 In reaching its conclusions on the initial capital base, the Commission has endeavoured to validate the Epic Energy designs and estimates by independent methods, using in-house and external consultants. It is understood that the Commission does not dispute the physical designs presented by Epic Energy.

6.50 The Commission has offered an alternative cost estimate on the basis of the experience of its consultants. However the estimating method only identifies the costs associated with a number of the more significant unit cost items, and applies unit rates to those items.

6.51 But the unit rates applied by the Commission do not properly account for all of the costs that are associated with each cost item. The failure to apply an allowance for omissions probably represents the most significant difference between the costs estimated by Epic Energy and the costs estimated by the Commission.

6.52 There is also evidence that the Commission and its consultants have used unit costs that are at the lower bound of the range that is commercially offered (see the comment on SKM's letter below).

6.53 Epic Energy contends that this is an unreasonable approach, since there are often commercially sound reasons for not adopting the lowest cost offer. While

this approach might be useful in establishing whether a proponent is deliberately overstating the cost, it is not a reasonable basis for establishing the probable cost of the project.

6.54 The Commission has concluded that Option D (DN 600, Class 600) presented by Epic was lower cost than the Epic Energy's solution (Option B, DN 550, Class 900).

6.55 Both Epic Energy and the Commission have developed an optimum solution based on steady state capacity modelling the pipeline. This generally returns a conservative design when applied to an actual load profile. It is probable that a better solution could be developed using an unsteady state hydraulic design process based on knowledge of the load profile and optimised for a competent projection of load growth. However it is a more costly and time consuming process requiring detailed analysis and quality input data, and any cost difference is likely to be within the order of accuracy of the estimate.

6.56 The optimised transient design has been used by the Commission in establishing the capital base for another transmission pipeline, and it did deliver a smaller diameter pipeline than one based on steady state design. This suggests that the Commission's process can result in the capital base for some pipelines being more "optimum" than others and throws some doubt on the comparative quality of the cost basis established for regulated pipelines.

6.57 It is clear that Epic Energy and the Commission have spent a very considerable sum on what should essentially be relatively straight forward core business for Epic and its consultants, and should require a relatively simple validation process by the Commission. The fact that this has not been achieved shows that there is a basic flaw in the process.

6.58 As mentioned previously, the Commission relied upon consultants to attempt to substantiate the value of the initial capital base in the final decision. They included reports from the following consultants:

- Connell Wagner final report, dated April 2000 and prepared to support the draft decision
- A letter from Sinclair Knight Mertz ("SKM") dated 29 August 2001
- Microalloying International: Report on Pricing of High Strength Steel Linepipe, dated 7 December 2000.

SKM Letter

6.59 SKM's letter is a current review of work undertaken largely by the Commission since an earlier review in August 2000 by Connell Wagner. SKM make a number of observations.

6.60 First is that the appropriate estimate is the 50th percentile of estimating uncertainty. This statement may provide a degree of comfort to Regulators, but nothing in any of the estimates that reviewed by Epic Energy or its consultants have contained data that would allow the 50th percentile to be determined, simply because none of the estimates have been undertaken at a level of detail that would allow this value to be reliably determined.

6.61 Industry experience is that estimators invariably underestimate project costs because they attempt to undertake accurate estimates, but in doing so do not provide sufficient contingency for those items that are omitted from the scope definition at the time, and those items that changed between the date of the estimate and the date of completion.

6.62 It is for this reason that the estimate prepared by the Commission requires a contingency, while those prepared by Epic using historic "all-in" costs may adequately address omissions.

6.63 The second SKM observation is that the Commission's approach to an alternative estimate is more robust than that undertaken by Epic Energy. Epic Energy established the physical design of the pipeline alternatives by a robust hydraulic modelling process, using established hydraulic models of the existing pipeline system, modified to reflect the operating conditions for Options A, B, C and D.

6.64 Since Epic Energy has an accurate model of its pipeline network, and appropriate computer modelling software is utilised, criticism of the quality of the physical design, compared with the ACCC's spreadsheet would seem unfounded and unreasonable.

6.65 Gas pipeline hydraulic modelling is a mature technology. Unless there is a fundamental problem with the computation or input data, both Epic Energy and the Commission should deliver the same physical solution for the same input data.

6.66 The Commission uses a spreadsheet to develop capital cost estimates that incorporates a number of cost elements. SKM contend that because the component costs are more visible, that the result is more robust. However the Commission estimate remains simplistic, and can only be considered more robust if it addresses all component costs, including those not addressed by the unit items.

6.67 Epic Energy has designed and constructed a number of transmission pipelines, including one of the first long distance ANSI Class 900 pipelines in Australia. The "all in" costs used by it are based on an analysis of actual project costs. The actual cost for construction of the Ballera to Wallumbilla (Qld) pipeline is relevant because its design, characteristics and environment is similar to that for the Moomba to Adelaide pipeline.

6.68 The tabulation on page 5 of the SKM letter indicates that the cost of the Ballera – Wallumbilla pipeline was $17,975 /inch/km. This is incorrect - the actual cost was $20,200 /inch/km.

6.69 SKM indicate that the Commission has used the lowest pipe price provided by Microalloying as the basis of their capital cost estimate, and they support this decision. This conflicts with their earlier statement that indicated that the estimate was aimed at the 50th percentile. This approach would require firstly validation of the quality and production capacity of the mills, the landed cost, coating costs, and then the application of a median unit cost to the estimate.

6.70 While SKM is a competent consulting engineer, is has no demonstrated expertise in design, construction or construction management of gas transmission pipelines. Hence its comments are based on publicly available information rather than detailed knowledge of the industry. Industry experts have serious difficulty in establishing a reliable cost estimate and even when they do, they can often misread the construction market. Consequently SKM's advice has some value as an independent assessment of cost relativity, but not on absolute values.

Microalloying International Report

6.71 Microalloying International's report presents the results of a survey of costs from international pipe suppliers, and an assessment of the probable manufacturing cost of line pipe. The conclusions drawn in the report are appropriate, and reasonably consistent with the supply cost for DN 350 and DN 450 ERW line pipe supplied recently in Australia.

6.72 It should be noted that Microalloying have represented each of the mills surveyed as producing the same quality line pipe with the same level of customer quality inspection. Microalloying have in the past expressed a strong opinion that not all mills are equal, and that significant owner costs may be required to ensure that an appropriate quality is delivered. These costs are ignored in the Microalloying comparison.

Other factors that should be considered in establishing the initial Capital Base

Section 8.10(c) – the value that would result from applying other well recognised asset valuation methodologies in valuing the covered pipeline

6.73 The Commission has used other valuation methodologies but has done so as a guide in assessing the reasonableness of the Commission's DORC valuation.

6.74 Epic Energy contends that this is a fundamental flaw in approach as DORC (or even the value that is derived from applying the DORC methodology) should not be used as the benchmark methodology.

Section 8.10(e) - International best practice

6.75 Section 8.10(e) of the Code provides that international best practice of Pipelines in comparable situations and the impact on the international competitiveness of energy consuming industries are factors that must be considered in determining the initial Capital Base.

6.76 For the reasons stated above in relation to the optimised replacement cost, the value proposed by Epic Energy is reflective of international best practice of pipelines in comparable situations.

Section 8.10(f) - Historical tariffs, economic depreciation and historical returns to service providers

6.77 The factors to be considered which are outlined in section 8.10(f) of the Code are the basis on which tariffs have been (or appear to have been) set in the

past, the economic depreciation of the Covered Pipeline, and the historical returns to the Service Provider from the Covered Pipeline.

6.78 It must be remembered that the historical tariffs for the MAPS were as a result of arrangements entered into when the state of South Australia owned the pipeline system. Accordingly, Epic Energy had no control over their determination.

6.79 Given the basis upon which state owned assets were privatised during the 1990s and the uncertainty as to the content and application of the regulatory framework at the time, it would be dangerous to rely upon this factor as a basis for concluding that Epic Energy has earned higher than normal returns in the past so as to justify a lower value for the asset.

6.80 Epic Energy has been unable to consider the economic depreciation and the historical returns to the previous Service Provider for the MAPS in establishing its initial Capital Base, because the DBNGP has changed ownership twice since its construction and for most of its expended life, the Service Provider did not provide third party access to the pipeline.

6.81 Yet despite this, the Commission undertaken the exercise and concluded that the value as at 30 June 2000 is at the most, $301m.

Section 8.10(g) - Reasonable expectations of persons under previous regulatory regime

6.82 Section 8.10(g) of the Code requires the reasonable expectations of persons under the regulatory regime that applied to the Pipeline prior to the commencement of the Code to be considered.

6.83 Much has been made of this issue by Epic Energy in its submissions to the Western Australian Independent Gas Pipelines Access Regulator with respect to the assessment of the access arrangement for the DBNGP. Furthermore, this issue has been raised in public forums in the review of the National Access Regime and National Energy Markets.

Section 8.10(h) - Economically efficient gas utilisation

6.84 The impact on the economically efficient utilisation of gas resources is a factor to be considered in accordance with section 8.10(h) of the Code.

6.85 Epic Energy's position is that because:

- the Government of South Australia is likely to be in the best position to assess the economic efficiency of gas utilisation; and
- given the rigorous scrutiny of its proposed tariff and tariff path at the time of the sale of the MAPS,

it is reasonable to infer that the Government was satisfied that the tariff and tariff path resulted in economically efficient gas utilisation.

Section 8.10(i) - Comparable cost structure

6.86 Section 8.10(i) requires the comparability with the cost structure of new Pipelines that may compete with the Pipeline in question to be considered in determining the initial Capital Base.

6.87 Epic Energy has already demonstrated in an earlier confidential submission to the Commission of the real and significant risk of by-pass of the MAPS. However, this is not because of the fact that the level of the tariffs proposed by Epic Energy is too high. Rather, it is as a result of the need for the largest incumbent users of the pipeline seeking to preserve their position in the downstream markets in which they operate.

6.88 As such, there would be a real risk of making any comparison with the cost structure of the proposed pipeline from Victoria.

Sections 8.10(j) and (k) - Purchase price and other factors

6.89 Finally, the additional factors to be considered under sections 8.10(j) and (k) of the Code are the price paid for any asset recently purchased by the Service Provider and the circumstances of that purchase, and any other factors the Commission considers to be relevant.

6.90 Section 8.10(j) empowers the Commission to enquire into the purchase price of the pipeline and the circumstances of the purchase to determine whether, in all of the circumstances, the purchase price is an appropriate basis for the initial Capital Base. This is consistent with the Commission's obligation (under section 2.24 of the Code) to take into account the "legitimate business interests" of the Service Provider and its "investment in the pipeline".

6.91 Given the above, it was open for the Commission to conclude that the initial Capital Base proposed by Epic Energy has been determined in a manner consistent with the Reference Tariff Principles.

Working Capital

6.92 Epic Energy has recently been made aware of the existence of a report prepared for the Commission by the Allen Consulting Group on Working Capital and its relevance for the assessment of reference tariffs. While the report is available on the Commission's website and there is no express statement that it has been prepared for the sole purpose of the Commission's assessment of the MAPS access arrangement, the fact that the only example used in the report is the claim for working capital to be included in the total revenue calculation, can only lead to the inference that it was prepared for that very purpose.

6.93 Epic Energy is disappointed that it must become aware of such important issues via these means. It has been more than three months since the date of the report, and still the Commission has not notified Epic Energy directly of the existence of the report. This only serves to highlight the concerns raised by the pipeline industry on repeated occasions of the lack of transparency of regulators in the regulatory approval processes under the Code. The requirement to afford service providers such as Epic Energy a fair hearing is

even more imperative given that it is the service provider's entire business that is affected by regulators' decisions.

6.94 Given that Epic Energy has only just now become aware of the existence of the report, it requests that the Commission afford it a reasonable opportunity to respond to the issues raised in the report.

New Facilities Investment

6.95 Sections 8.15 to 8.21 of the Code provide for the Capital Base to be increased from the commencement of a new Access Arrangement Period to recognise additional capital costs incurred and forecast capital costs in respect of constructing extensions/expansions to the capacity of a Covered Pipeline for the purpose of providing Services.

6.96 This is not an issue in the final decision as no such investment is proposed in the access arrangement period.

Rate of return

6.97 Section 8.30 of the Code provides that the Rate of Return 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).

6.98 Section 8.31 of the Code is non-prescriptive as to how the Rate of Return should be calculated. It provides that, 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 Commission is satisfied that to do so would be consistent with the objectives contained in section 8.1.

6.99 The method used by Epic Energy in calculating its rate of return is set out in clause 5.2(a)(vii) of the proposed access arrangement and section 3.2 of the access arrangement information.

6.100 Epic Energy has calculated its rate of return on the basis of the weighted average of returns applicable to debt and equity and with the return:

- on equity being determined using the capital asset pricing model; and
- on debt being determined as the sum of a risk free rate of return and the estimated corporate debt premium (see section 3.2 of Epic Energy's revised access arrangement information).

6.101 The return on assets is then calculated by multiplying Epic Energy's rate of return by the capital base at the beginning of each year of the Access Arrangement.

6.102 While the Commission does not in principle dispute the methodology adopted by Epic Energy in determining the rate of return (ie the WACC, determined on

the basis of applying the capital asset pricing methodology for determining the cost of equity), it takes specific issue with the values of the various parameters that are the basis of the methodology.

6.103 Epic Energy contends that the approach adopted by the Commission is symptomatic of the approach of regulators under the Code – that is in determining whether a service provider's proposal is consistent with the relevant principles in the Code, regulators have proceeded as if the question were whether the proposal were, in the opinion of the Commission, "compliant". This is incorrect. The issue of compliance must be determined by applying the principles in section 2.24. If the service provider's proposal complies with those factors, the Commission must recommend that the terms and conditions are acceptable. The fact that these same factors (if they were applied by the Commission) may have been dealt with in a fuller, or different way to the way considered ideal by the Commission, should not cause them to be rejected by the Commission.

6.104 This is compounded by the approach of the Commission to adopt the parameters of a notional project specific service provider. One questions how this enables the Commission to take into account the factor in section 2.24(a).

6.105 The specific aspects of the Commission's rate of return calculation that Epic Energy considers do not reflect a proper balancing of the section 2.24 factors include:

- The appropriateness of the capital asset pricing methodology in determining the cost of equity.
- The utilisation of imputation credits
- The effective tax rate
- The value of beta in the CAPM. In particular, Epic Energy refers to the Brattle Group report on the cost of capital it prepared to determine the weighted average of returns for the DBNGP and the methodology used (a copy of which has been provided to the Western Australian Independent Gas Pipelines Access Regulator ("Cost of Capital Report")). The methods used in this report to calculate the weighted average of returns on debt and equity involve the use of well accepted financial models for establishing the rate of return. These rates of return have been averaged assuming a financing structure (ie, 60% debt and 40% equity) which Australian regulators regard as standard for Australian utilities.
- The proper treatment of certain risks, particularly in relation to bypass risk and self insurance risks.

6.106 The approach adopted by the Commission gives the impression that there is only one precise outcome from the application of the methodologies.

6.107 This is particularly so in relation to the Commission's approach to determining the appropriate cost of equity (ie in its application of the CAPM). There is also a concern that the quantities needed to apply such methodologies as the CAPM cannot be estimated with enough precision to allow the method to be used in rate determination.

6.108 While there is some literature to suggest that the CAPM is inappropriate to use in regulated rate setting[28], the more accepted view is that CAPM, like any other cost of capital estimation method, should be used carefully as it does not generate precise outcomes in respect of the values of the CAPM parameters and in some instances, it may not deal appropriately with certain issues (such as risk). The Commission does state in the final decision that the values of the CAPM parameters do generally fall near the middle of a narrow range based on the information available. However, for example, in relation to the value of beta, nowhere does the Commission state in its final decision that the value proposed by Epic Energy of 0.58 is unreasonable.

6.109 In relation to the treatment of self insurance risks, Epic Energy has provided the Commission with significant detail to justify its position. Epic Energy does not believe that its approach is unreasonable.

6.110 In a letter to Epic Energy, dated 16 April 2002, the Commission set out the means by which these additional risks that Epic Energy has to bear as a result of the change in the insurance climate would be treated in the total revenue calculation. It stated that the self insurance costs should be included as non capital costs, so long as they were prudent, quantifiable and actuarially determined. In that respect, the Commission set out the additional information that would be required before they would be allowed to be included as part of the non capital costs. – this included a board resolution to self insure

6.111 There are 2 issues that Epic Energy believes need to be addressed in relation to this letter. The first is the appropriate method of treatment of self insurance risks. Epic Energy proposed in its Final Decision Submission #6 – Insurance Issues, that these risks should be treated by making an adjustment through the rate of return on equity. In adopting this approach, Epic Energy relied on its view of the Commission's reasoning in its assessment of various access arrangements, including the Victorian Access Arrangements in 1998.

6.112 In the Commission's letter of 16 April 2002, it concludes that Epic Energy has misinterpreted the Commission's decision.

6.113 Epic Energy disagrees that it has misinterpreted the Commission's views. In fact, Epic Energy's approach is supported by the Commission's final decision in the Central West Pipeline access arrangement, which states as follows:

"The Commission has considered the arguments presented that there are significant downside risks that outweigh potential upside benefits which would be in addition to the profits implied by the target revenue calculations. It has also considered AGLP's argument for a premium to allow for self insurance. It acknowledges that these risks are difficult to quantify. It also notes that for the Victorian Final Decision, such risks were taken account of to some extent by choosing beta estimates towards the top end of the plausible ranges as suggested by the financial experts at the WACC forum."

6.114 The second issue from the Commission's letter of 16 April 2002 that needs addressing is the additional information required to be provided to justify the inclusion of these additional costs in the total revenue calculations.

[28] For example, Bonbright, Danielsen and Kamerschen

6.115 Epic Energy does not believe that the provision of the additional information will assist in giving further credibility to Epic Energy's position. Nor for that matter, would it provide the Commission's approach with any greater credibility. By the Commission's very own admission (see the quote above), these risks are very difficult to quantify. Even if there were an attempt at quantification, the veracity of the calculations would always be in doubt. This has been demonstrated by the report prepared by Trowbridge Consulting for SPI PowerNet on the valuation of non-insured risks.[29]

6.116 Accordingly, it does not intend to provide the additional information requested of the Commission in its letter of 16 April 2002. Nonetheless, it is prepared for the Final Decision Submission #6: Insurance Matters to be made public.

Depreciation

6.117 Sections 8.32 and 8.33 of the Code specify how assets are to be depreciated when the Cost of Service method of determining Total Revenue is used. The depreciation method used must be depicted in a depreciation schedule which has been designed to meet the objectives in section 8.33 of the Code.

6.118 Given that Epic Energy has used a Cost of Service method to determine Total Revenue, the Commission should, in accordance with section 8.33 of the Code, consider whether the Depreciation Schedule in Epic Energy's proposed access arrangement has been designed so that:

- the Reference Tariff changes over time in a manner that is consistent with the efficient growth for the Services provided by the MAPS;
- each asset or group of assets that form the MAPS is depreciated over the economic life of that asset or group of assets;
- to the maximum extent reasonable, the depreciation schedule for each asset or group of assets that form the MAPS is adjusted over the life of the asset or group of assets to reflect changes in the expected economic life of that asset or group of assets; and
- an asset is depreciated only once.

6.119 Epic Energy's Depreciation Schedule and how depreciation is treated is set out in section 3.1 of the proposed access arrangement information.

6.120 The Commission's approach to depreciation however, has the effect of certain components of the pipeline system already being fully depreciated. Yet no allowance has been made for the replacement of these items in the capital base calculation.

Non Capital Costs

6.121 Section 8.36 of the Code defines "Non Capital Costs" to mean the operating, maintenance and other costs incurred in the delivery of the Reference Service.

6.122 If Non Capital Costs are to be recovered through a Reference Tariff, the Commission must be satisfied that those costs would have been incurred by a

[29] Trowbirdge Consulting report: Valuation of Non-Insured Risks – SPI PowerNet, dated December 2001

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.

6.123 In section 4 of the proposed access arrangement information, Epic Energy states that the Reference Tariff provides for the recovery of all forecast Non Capital Costs to the extent permitted under section 8.37 of the Code. The Non Capital Costs included in the Reference Tariff are itemised in sections 4 of the revised proposed access arrangement information.

6.124 It is noted that the Commission considers that, overall, the proposed costs are reasonable.

6.125 However, for reasons stated earlier in this submission and in submission FDS#6, Epic Energy does not agree with the Commission's proposal contained in its letter of 16 April 2002 that the proposed additional costs Epic Energy has had to incur as a result of the increased self insurance costs should be included as non-capital costs.