



# **DAMPIER TO BUNBURY NATURAL GAS PIPELINE**

## **PROPOSED ACCESS ARRANGEMENT UNDER THE NATIONAL ACCESS CODE**

### **RESPONSE TO DRAFT DECISION**

#### **Court Decision Additional Paper CDAP#2: Supplementary Response to Draft Decision Amendments**

**28 February 2003**

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## Introduction

- 1.1 On 31 December 2002, Epic Energy filed a submission in response to the amendments contained in the Regulator's Draft Decision (CDS#5<sup>1</sup>), having regard to the decision and associated reasoning of the Full Court of the Supreme Court of Western Australia ("Court") on 23 August 2002 in relation to Epic Energy's legal challenge of the Draft Decision ("Court Decision").<sup>2</sup>
- 1.2 In CDS#5 Response to Draft Decision Amendments, Epic Energy advised it would provide further information in relation to the following matters:
- items comprising its capital expenditure figures in the proposed Access Arrangement (draft decision amendment 53);
  - key performance indicators (draft decision amendment 56);
  - the outcome of additional studies carried out with a view to establishing the feasibility of aggregation downstream of Kwinana Junction (draft decision amendment 78).
- 1.3 This paper (at sections 3, 4 and 5) provides the further information in relation to draft decision amendments 53 and 78. It also contains additional information in relation draft decision amendment 74, as this amendment is directly connected to amendment 78. Epic Energy shall provide the further information in relation to draft decision amendment 56 as soon as possible in a separate paper to the Regulator.
- 1.4 However as a preliminary issue, section 2 of this paper deals with the issue of the inclusion of certain capital items in the initial capital base and certain forecast capital expenditure in the capital base and total revenue calculations for the purposes of the first access arrangement period. This is required as a direct consequence of the Regulator's approach in AlintaGas Distribution's application for approval under section 8.21 to include in the Capital Base certain costs associated with the implementation of full retail contestability and the resultant Code Change proposal that was initiated by Western Australia.

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<sup>1</sup> Epic Energy Submission CDS5: Response to Draft Decision Amendments, dated 31 December 2002.

<sup>2</sup> Re Dr Ken Michael AM; Ex parte Epic Energy (WA) Nominees Pty Ltd & Anor [2002] WASCA 231.

## 2 New Facilities Investment - Application of the Code

- 2.1 In the Draft Decision the Regulator takes the view that he can avail himself of sections 8.15 to 8.22 of the Code when approving the initial access arrangement for a pipeline, particularly in relation to the establishment of the total revenue for that access arrangement period. However, all that he states to this effect is the following:

*“The Capital Base of a Covered Pipeline may be increased from the commencement of a new proposed Access Arrangement Period to recognise capital costs incurred in constructing New Facilities for the purposes of providing services, subject to the New Facilities Investment meeting certain criteria.”<sup>3</sup>*

- 2.2 The Regulator also takes the view that section 8.20 of the Code allows for reference tariffs to be determined on the basis of New Facilities Investment that is forecast to occur within the Access Arrangement Period (even the first) provided that the investment is reasonably expected to pass the requirements of section 8.16 when the investment is forecast to occur. Although this does not mean that the forecast investment will automatically be added to the Capital Base after it has occurred.<sup>4</sup>

- 2.3 In the Draft Decision, the Regulator has relied on these provisions to:

- (1) Propose to allow for the reference tariffs for the first access arrangement period to be determined on the basis of a number of items of New Facilities Investment that is forecast to occur within this period; and
- (2) Propose to allow for such New Facilities Investment to be included in the Total Revenue for the first access arrangement even though some of these items do not include capital works that directly attach to the Pipeline. For example, some of the New Facilities Investment relates to capital works for the DBNGP’s communications and IT systems.

- 2.4 However, since the Draft Decision, the Regulator and the State of Western Australia have publicly announced that uncertainty exists in the interpretation of the New Facilities Investment provisions of the Code in the following respects:

- whether capital expenditure incurred in providing Services (including the cost of non-pipeline assets such as IT systems and vehicles) may be rolled into the Capital Base of the Covered Pipeline, subject to applicable efficiency and other criteria; and
- how forecast capital expenditure can be included for the purposes of determining Reference Tariffs and whether the Regulator can agree before an Access Arrangement review that forecast expenditure will meet

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<sup>3</sup> Draft Decision, page B: 156, section 5.4.1

<sup>4</sup> *ibid*, page B: 157

the relevant criteria for inclusion in the Capital Base at the forthcoming review.

- 2.5 As such a proposal has been put forward by NGPAC to amend the Code to overcome the claimed uncertainty. As at the date of this paper, the Code change had not been approved by Ministers.
- 2.6 The claimed uncertainty arises from adopting a narrow approach to the interpretation of the Code. Epic Energy submits that such a narrow approach can not be credibly founded (and therefore any perceived uncertainty is just that).
- 2.7 Accordingly, it would appear that the Code provisions as they are currently drafted, do allow for:
- The initial Capital Base to include capital cost items relating to assets which, while related to the provision of Services on a pipeline are not attached to the physical pipeline itself (eg Communication and IT systems, spares and inventory etc);
  - The total revenue for the first access arrangement period to be determined having regard to all capital cost items which are forecast to be incurred during the first access arrangement period and which are reasonably likely to satisfy the test in 8.16 of the Code for New Facilities; and
  - The Regulator to give a binding ruling under section 8.21 that certain forecast new facilities investment meets the criteria under section 8.16 of the Code before that investment is made by the Service Provider.
- 2.8 Epic Energy's reasons to support its conclusion are as follows
- The existing Code provisions relating to New Facilities Investment and Capital Base are sufficiently broad to allow the recognition of the categories of costs at issue being included in the initial capital base and total revenue calculation in the first access arrangement period.
  - even if there is some uncertainty as to the meaning of a particular term in the Code, the recent decision of the Full Court of the Western Australian Supreme Court in the Epic Energy Decision<sup>5</sup> adopted a purposive approach to the construction of provisions of the Code. To adopt a narrow approach in relation to the interpretation of the new facilities investment provisions and the initial capital base would be inconsistent with the approach of the Court.
  - Further, the Court in the Epic Energy Decision also established that the proper construction of the provisions of the Code relating to the Reference Tariff and Reference Tariff Policy of an access arrangement requires fundamental regard to be had to the objectives in section 8.1 and the considerations and factors in section 2.24 of the Code.

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<sup>5</sup> See Re Dr Ken Michael, ex parte Epic Energy (WA) Nominees Pty Ltd & Anor [2002] WASCA 231. 28 February 2003

- A Reference Tariff and Reference Tariff Policy must be designed with a view to achieving the objectives in section 8.1 and as part of the process of approval of an access arrangement, taking into account the considerations and factors in section 2.24 of the Gas Code<sup>6</sup>. This is made explicit in relation to the New Facilities Investment provisions by virtue of section 8.22, at least in the context of determining whether the Capital Base should be adjusted if the forecast New Facilities Investment differs from the actual investment.
- The relevant paragraphs of sections 8.1 and 2.24 that clearly envisage the inclusion of such costs in the Capital Base are at least as follows:
  - Section 2.24(a) – the service provider’s legitimate business interests and investment in the Covered Pipeline. If a service provider is required to incur certain costs to comply with changes imposed by government (through policy changes or the application of policy), it is legitimate for the service provider to be afforded the opportunity to recover that investment.
  - Section 2.24(c) – the operational and technical requirements necessary for the safe and reliable operation of the Covered Pipeline. No Service could be safely or reliably provided without, for example, communication systems.
  - Section 2.24(e) – the public interest, including the public interest in having competition in markets (whether or not in Australia). This is self explanatory.
  - Section 8.1(b) – replicating the outcome of a competitive market. The establishment of a system which encourages an efficiently built system is one of the outcomes of a competitive market.
  - Section 8.1(c) – ensuring the safe and reliable operation of the pipeline. See comments above in relation to section 2.24(c).
  - Section 8.1(d) – not distorting investment decisions in Pipeline transportation systems or in upstream and downstream industries. Were such costs not to be allowed, this would be the outcome.
  - Section 8.1(e) – efficiency in the level and structure of the Reference Tariff. It would be more efficient for these costs to be included as capital costs as opposed to non capital costs as it would give rise to an uneven tariff path.
- As an additional matter, while not carrying the same force and effect as is afforded to a decision of a Court, Epic Energy notes that through the Code change process relating to this amendment, NGPAC has determined that the relevant provisions of the Code on this issue should be afforded their broad interpretation, as this “best reflects the apparent intention of the Gas Code”.

2.9 As indicated in Epic Energy’s letter to the Regulator of 19 February 2003, as a member of NGPAC, APIA has taken an active role in the debate on the proposed Code change. Epic Energy was concerned to ensure that any Code change that is put forward to Ministers, does capture all required

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<sup>6</sup> See Re Dr Ken Michael, ex parte Epic Energy (WA) Nominees Pty Ltd & Anor [2002] WASCA 231. 28 February 2003

amendments. Primarily this was directed at avoiding unintended consequences which may arise by making narrow specific changes in one area and hence causing another area to be read down to not include such items as the same amendment was not made.

- 2.10 On behalf of APIA, Epic Energy made submissions to NGPAC and the Project Team to the effect that if Regulators were to adopt the same narrow approach to the interpretation of the Code similar to the one that formed the basis of Western Australia's justification for the current Code change, doubt exists as to whether Service Providers and Regulators could rely upon the new facilities investment and forecast capital expenditure provisions of the Code and include:

- (1) These types of costs which had been incurred into the initial Capital Base; and
- (2) (even on a provisional basis) these forecast costs in the total revenue calculation for *the first access arrangement period*.

- 2.11 Epic Energy's view is based on a narrow approach to the interpretation of sections 8.8 and 8.20 to 8.22 of the Code. While it does not accept this is the way a Court would approach the interpretation of the provisions (particularly in light of the Court's comments in the DBNGP Decision), it acknowledges that this is a possibility.

- 2.12 As a result of these arguments and at APIA's request, proposed amendments were made to sections 8.10 and 8.13 in the Amending Agreement to overcome this uncertainty. These amendments were however, deleted from the final version of the Amending Agreement that was circulated for NGAPC approval, without substantive justification from NGPAC or the Project Team.

- 2.13 Following discussions with the Project Team, Epic Energy understands that these proposed amendments were removed at the request of Regulators who apparently expressed the view to the Project Team that the Code is quite clear in that it allows a Regulator to rely on the forecast capital expenditure provisions to determine the total revenue, even for the first access arrangement period. There was also apparently no issue about whether capital costs incurred for the purposes of providing services but which were not related to something which directly attaches to the physical pipeline could be included as part of the initial Capital Base.

- 2.14 While Epic Energy gains comfort from these apparent assurances by Regulators to the Project Team and from the Regulator's draft decision on the DBNGP access arrangement that:

- (1) capital expenditure incurred in developing assets that are required for the purposes of providing services but which do not physically attach to the pipeline can be included in the initial capital base; and
- (2) forecast capital expenditure incurred in developing assets that are required for the purposes of providing services but which do not physically attach to the pipeline can be included in the total revenue calculations for the first access arrangement period,

Epic Energy has no certainty that the Regulator's final decision on the DBNGP access arrangement would adopt the same approach to interpretation of the Code.

- 2.15 This is particularly so given the Regulator's public announcement on 27 December 2002 in relation to AlintaGas' application for inclusion of costs associated with Full Retail Contestability.
- 2.16 Given the imminent decision of Jurisdictions to effect the Code change and the ramifications to Epic Energy of any change in the Regulator's approach from that in the draft decision, Epic Energy sought the Regulator's confirmation that:
- The initial Capital Base of the pipeline would include amounts relating to capital expenditure incurred prior to the submission of the access arrangement in developing assets that are required for the purposes of providing services but which do not physically attach to the pipeline; and
  - forecast capital expenditure incurred in developing assets that are required for the purposes of providing services but which do not physically attach to the pipeline can be included in the total revenue calculations for the first access arrangement period, subject of course to that forecast expenditure meeting the requirements of 8.16 and 8.20 to 8.22 of the Code.
- 2.17 Epic Energy is still awaiting confirmation from the Regulator in relation to the above.
- 2.18 If the Regulator is not persuaded by Epic Energy's arguments above and remains of the view that the Code, as it currently stands, does not allow for either:
- the initial capital base to include capital assets developed for providing services but which do not physically attach to the pipeline; or
  - forecast capital expenditure to be incurred in providing services but which are capital assets which are not directly attached to the physical pipeline such as IT systems and vehicles to be included in the total revenue calculations for the first access arrangement period;

Epic Energy urges the Regulator, when making his final decision, to give a conditional approval to include these costs subject to the Code amendment being implemented prior to the Final Approval being granted.



### **3 Capital Expenditure Items**

- 3.1 In the Draft Decision the Regulator identified four categories of issues in relation to certain capital expenditure items. These issues were:
- First, there are certain items with respect to which the Regulator claims he has not been provided sufficient information to enable him to form a view on the reasonableness of the proposed expenditure item or a part of the costs relating to the item. Having said that however, he then considers that, for the purposes of the Draft Decision, these items could reasonably be expected to pass the section 8.16 test. It is unclear from the Regulator's reasoning as to whether further information is required to be provided by Epic Energy to enable these costs to be included as part of the forecast New Facilities Investment for the purposes of determining the total revenue in the final decision (the "category one issue in relation to expenditure").
  - Second, there are instances where the Regulator has found that particular capital projects proposed by Epic Energy in its proposed access arrangement can reasonably be expected to meet the New Facilities Investment test in section 8.16 of the Code and therefore their costs can be included as part of the total forecast capital expenditure. But, the Regulator states that, in accordance with the Code, he will require additional justification as to the nature of the projects or the proposed costings for the projects before he will allow the actual costs to be included as part of the Capital Base at the time of review of an Access Arrangement or, at the time an application is made for approval of the actual capital expenditure. In addition, in light of the Regulator's position on AlintaGas' FRC costs application<sup>7</sup>, there is uncertainty whether the Regulator will allow these costs to be included in the total forecast capital expenditure to be used for the purposes of deriving the total revenue for the first access arrangement period (the "category two issue in relation to expenditure").
  - Third, there are particular capital projects proposed by Epic Energy with costs which the Regulator believes should not be included in the total forecast capital expenditure for the first access arrangement period but rather, should be included as part of the service provider's non capital costs (the "category three issue in relation to expenditure").
  - Fourth, parts of the costs of one particular item should be part of the initial Capital Base rather than included as part of the total forecast capital expenditure that is included as part of the total revenue calculation (the "category four issue in relation to expenditure").
- 3.2 This part of the paper contains Epic Energy's response in relation to each capital expenditure item proposed by Epic Energy that falls under the relevant categories identified above.

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<sup>7</sup> Regulator's Information Paper, dated 27 December 2002  
28 February 2003



- 3.3 It should be noted that there are various expenditure items which do not fall within any of the above four categories. It is noted that in the Draft Decision, the Regulator has considered these to be reasonable and likely to pass the section 8.16 test. Epic Energy does not provide any additional comment in relation to these items at this stage.
- 3.4 As a further preliminary point, it should be noted that most of these costs were identified as being required to be carried out to ensure the safe and reliable operation of the pipeline. The costs were identified pursuant to a Safety Case carried out on the pipeline in June 1999. Epic Energy is required under its pipeline licence to develop and maintain a Safety Case for the DBNGP. The Safety Case is approved by the DOIR, being the safety and technical regulator of the pipeline.
- 3.5 The Safety Case comprises three elements: The facility Descriptions, the Safety Management System and the Formal Safety Assessment. The Safety Management System addresses all aspects of administering and managing safety on the pipeline. The formal safety assessment is represented by a risk assessment undertaken on the pipeline pursuant to AS2885.
- 3.6 The safety related capital costs have been proposed as a direct result of the Safety Case, which, as mentioned above, was approved by the technical and safety regulator. Given this, they should be accepted by the Regulator without question.
- 3.7 Furthermore, the Full Court in the DBNGP Decision noted the following in relation to costs required for the safe and reliable operation of the pipeline:
- “It is clear from s2.24(c) that the ongoing safe and reliable operation of the pipeline must be taken into account. Expenditure necessary for this purpose must be taken into account **whether or not** that would occur in a competitive market or according to theories of economic efficiency.” (*emphasis added*)

### **Category One Issue in relation to Capital Expenditure:**

- 3.8 Pipeline Protection:
- 3.8.1 In the Draft Decision the Regulator stated that in the absence of information on required and proposed works, he considered that works of this type may be required for reasons of public safety and therefore could reasonably be expected to pass the tests of section 8.16 of the Code.
- 3.8.2 Epic Energy confirms that the work proposed is additional groundbeds and cathodic protection facilities to supplement existing cathodic protection facilities as the pipeline coating deteriorates with age and exposure to environmental and other deteriorating influences. The need for such reinforcement was based on Epic Energy's assessment as a prudent operator of such pipelines. The numbers and particulars of the additional cathodic protection facilities would be based at the

time on routine surveys indicating the location and magnitude of deterioration.

- 3.8.3 Epic Energy considers that these works clearly meet the test in section 8.16 of the Code and more particularly that the condition in section 8.16(b)(iii) is clearly satisfied.

3.9 W LPG Heat Exchanger Project:

- 3.9.1 In the Draft Decision the Regulator stated that technical advice provided to him was that the need for investment may arise from a higher inlet pressure to the W LPG plant subsequent to the commissioning of the CS9, and the larger the pressure reduction at the inlet to the plant results in lowering of the inlet gas temperature below the contractual limit. However, there may be alternative means of addressing the problem through pipeline operational practices. The Regulator required more rigorous justification to be provided before actual expenditure on this item would be added to the Capital Base.
- 3.9.2 Epic Energy notes that despite its request, the Regulator is yet to provide to Epic Energy a copy of the technical advice referred to in relation to this amendment. Accordingly, Epic Energy must reserve its position in relation to the Regulator's opinion on this project's compliance with the section 8.16 test. Furthermore, Epic Energy has simply done what a prudent pipeline operator would do and it has not been shown that the proposal does not fit in to that category.
- 3.9.3 Notwithstanding that, Epic Energy advises the Regulator that it has reached an agreement with the user of this inlet point to revise the operating agreements with W LPG to the effect that Epic Energy no longer requires to make an allowance for the capital expenditure on the heat exchanger.

3.10 Compressor Station Facilities.

- 3.10.1 In the Draft Decision, the Regulator concludes that provision has been made elsewhere in capital expenditure forecasts for computing facilities and software at remote work stations, and that there may be double counting by making provision for similar expenditure as part of compressor station facilities. While the Regulator accepts the forecast Capital Expenditure for the purposes of the Draft Decision, it is noted that more rigorous justification would need to be provided before actual expenditure on this item would be added to the Capital Base.
- 3.10.2 This item refers to the ability to access corporate systems from compressor station facilities rather than the development of corporate systems. There is therefore no double counting.
- 3.10.3 Costs include physical hardware for compressor stations to access the corporate network as well as the development and implementation of thin client technology to improve access speeds to corporate data.

Epic is using citrix server farms to enable this access. This need has resulted from the shift to a field based operation rather than a depot based one.

3.10.4 Accordingly, Epic Energy considers that all costs under this expenditure item meet the section 8.16 test.

3.11 Sulphur Deposition Mitigation Programme:

3.11.1 In the Draft Decision the Regulator stated that he accepted the forecast capital expenditure for the purposes of the Draft Decision. However, given the absence of results of the feasibility study Epic Energy indicated that it would carry out in 2000, he noted that more rigorous justification would be needed to be provided before actual expenditure on this item would be added to the capital base.

3.11.2 Epic Energy advises that the investigation and feasibility phase of this work has taken longer than anticipated in 1999. The investigative work is being conducted as an APIA research and development project due to general pipeline industry problems with the issue, and is due to issue its findings in June 2003.

3.11.3 In addition to the costs required to fund that research, following the completion of the report, it is most likely that costs will need to be incurred in implementing any recommendations. It is expected that these costs will be incurred during the existing regulatory period.

3.12 Microwave System Upgrade:

3.12.1 In the Draft Decision the Regulator stated that he accepted the communication systems may be necessary and will accept the proposed Capital Expenditure for the purposes for the Draft Decision. However, he noted that Epic Energy had not demonstrated that the microwave system to be the most cost effective communication system (he believed that a satellite system could be of lower initial cost and have lower maintenance costs) and that therefore more rigorous justification would need to be provided before actual expenditure on this item would be added to the Capital Base.

3.12.2 Epic Energy agrees that upgrading of the DBNGP microwave communications system may involve alternative means of providing communications. Feasibility studies have been conducted on a number of proposals for the overall communications upgrade since 1999 but none have proved financially viable to date.

3.12.3 The studies have shown that the satellite option is technically flawed in that it does not provide all the necessary services for voice communications and fails to deliver the reliability and availability for control of the pipeline. In addition the operating costs of satellite services to compressor stations, main line valves and meter stations are significantly higher than that of a microwave radio bearer. Satellite

option into compressor stations is seen as a short term solution given the high incremental costs for increased bandwidth.

3.12.4 If the Regulator is suggesting that an optimised pipeline would use a satellite based system rather than a microwave system, then Epic Energy assumes that the Regulator would allow the capital costs for that system and the associated operating costs.

3.12.5 Upgrade of particular sections of the microwave communications system has proven necessary for specific reasons. The most recent example is upgrade of spur radio sites (refer to our further comments in relation to Replacement of Remote Terminal Units at paragraph 3.9 below).

3.12.6 Epic Energy considers that therefore the costs associated with the proposed microwave systems upgrade meet the section 8.16 test.

3.13 Replacement of Remote Terminal Units (SCADA Upgrade):

3.13.1 In the Draft Decision the Regulator made comments in relation to a statement made in Epic Energy's maintenance branch 2000 annual program in relation to SCADA RTUs. In light of these statements, he considered that the replacement of the remote terminal units had been poorly justified. The Regulator however accepted the proposed Capital Expenditure for the purposes of the Draft Decision but required more vigorous justification to be provided before actual expenditure on this item would be added to the capital base. Epic Energy agrees that the RTUs have proven reliable and advises that currently it is only planned to replace RTUs in the immediate future when the RTU must be upgraded for other reasons.

3.13.2 To date there has been replacement of the RTUs at radio sites S1,S2,S3,S4,S5,S6 and S7. At these sites, the UHF radio links used for SCADA communications operated on the 800MHz band. Telstra procured the ownership of transmission rights in this band forcing Epic Energy and other users to progressively vacate the 800MHz band. The most economical solution was replacing the 800MHz analogue radio with digital 900MHz radios, but this was incompatible with the Conitel protocol used by the old RTUs. This required replacing the RTUs with a type that could be supported over the new radio link.

3.13.3 In Epic Energy's view these costs clearly meet the test of section 8.16 of the Code on safety grounds alone.

3.14 Customer Reporting System:

3.14.1 In the Draft Decision the Regulator referred to the electronic bulletin board already existing and noted concerns in relation to the proposed customer reporting system. He concluded that this item of expenditure had been poorly justified but nevertheless has allowed for the costs to be included in the total forecast capital expenditure for the purposes of

the Draft Decision. In addition, he was of the view that further detailed justification would be required before the expenditure would be added to the initial Capital Base.

3.14.2 Epic Energy advises that the electronic bulletin board referred to was a primitive system which basically put an electronic face on an unwieldy and largely manual system of nomination and throughput management. The system was highly error prone, subject to delays and there was a very high rate of adjustment notes issued making the system the subject of a high level of shipper complaints. It was recognised that a new system automating as many processes as possible was required.

3.14.3 It is now a matter of fact that Epic Energy has commissioned and implemented the Customer Reporting System. It has addressed the deficiencies of the previous system and is efficient and accurate. In fact, it has been the result of a number of industry awards and has been sought to be used by other service providers. Furthermore, it has been well received by customers. Notwithstanding that, it continues to be upgraded. Epic Energy repeats its earlier offers to demonstrate the system to OffGAR employees and the Regulator so that they gain a proper understanding of its features and capabilities.

3.14.4 In light of the above Epic Energy considers that this expenditure clearly meets the test of section 8.16 and in particular the expenditure provides efficient operation in accordance with accepted good industry practice.

### 3.15 Computer System Upgrades

3.15.1 On the basis of technical advice, the Regulator considers that the costs for upgrading of work station hardware and personal computers, integration of Epic Energy's computerised maintenance management system with the financial system and upgrading of the financial management system have been poorly justified. Nonetheless, the Regulator accepted the proposed Capital Expenditure for the purposes of this Draft Decision. However, he stated that more rigorous justification would need to be provided before actual expenditure on this item would be added to the Capital Base.

3.15.2 This item relates to various upgrades that have or shall be made to computer software that is utilised by Epic Energy. The upgrades and the associated benefits which result from the same are as follows:

- **The upgrading of the Novell Netware 5**

NetWare, made by Novell, is the most widely-installed network server operating system. The latest version of NetWare, NetWare 5, comes with support for both Novell's own Internetwork Packet Exchange network protocol and for the Internet Protocol as well as application-level support for a Web server. NetWare has integrated

its own Novell Directory Services (NDS) with the industry standard Domain Name System (DNS) and the Dynamic Host Configuration Protocol (DHCP). NetWare supports Java applications and the Common Object Request Broker Architecture (COBRA) Object Request Broker (ORB). Its kernel supports multiprocessing. Additional features include what it calls "next generation" file system and printing services and advanced security (public-key cryptography and Secure Authentication Services - SAS). Implementation of this product by Epic Energy has provided a more stable and secure network for all user ensuring data integrity and security.

- **The Upgrading of Zenworks v2**

Maintaining and managing desktops has become the most expensive part of owning a network. In an effort to cut these costs, organizations are turning increasingly to desktop management software. Driving this spending is the desire of organizations to not only reduce the total cost of ownership of network-attached devices but also increase the productivity of network administrators and end users. The move to directory-based desktop management also signals a shift from a device-centric to a user-centric approach to network administration, enabling more flexible, scalable, and extensible solutions.

Directory-based desktop management software increases network administrator productivity by automating the distribution and management of applications and other desktop software and by enabling central maintenance and management of desktops.

Desktop management software also makes it easier for network administrators to handle organizational changes and personnel moves as well as the growing diversity of desktop and handheld devices.

As for users, any interruption of their work, caused by hardware/software malfunction or upgrades, for instance results in lost productivity. The longer a malfunctioning desktop keeps a user waiting for it to be fixed, the larger the loss. Desktop management minimizes the time lost waiting for help-desk support.

ZENworks allows administrators to associate applications and desktop settings with individuals based on who they are or what their role is with Epic Energy, simplifying software distribution and desktop management. Administrators can also associate applications with individual desktops, departments, expediting network auditing and planning.

- **Epic's remote work station hardware and PCs will need to be continually updated as technology gets updated.**



It is standard and prudent business practice to replace information technology equipment on a regular refresh cycle. This project recognizes that practice. The reasons for doing so are that many independent studies have shown that the total cost of ownership of information technology equipment increases as time progresses. This increasing cost is caused by both equipment failure and decreasing efficiencies as new faster technology comes onto the market. All of Epic Energy's Information Technology is on a refresh cycle in line with industry standards being 4 years for desktops and 3 years for laptops.

- **Integration of Epic's Computerised Maintenance Management System with the Financial System (Peoplesoft)**

Epic's Computerised Maintenance Management System (Maximo) and the Financial System (Peoplesoft) do not have links between the two systems. The maximo system is used to raise purchase orders for the procurement of goods and services in running the Epic Energy pipeline system and the Peoplesoft accounts payable module is used to generate payments via cheques and electronic fund transfers to vendors. This project provides a link between these two systems to allow information to flow between the purchasing and the payment systems. One of the key benefits of this system is efficiencies as a result of having an integrated system thus eliminating manual interfaces and risks of vendors being double paid.

- **Peoplesoft Enhancements**

This project involves several phases as follows:

- **Phase 1** Hardware upgrade to move from a 2 tier to a 3 tier environment. This separates out the Peoplesoft application and data onto separate client servers and thus provides greater processing speed.
- **Phase 2** Database environment upgrade from SQL Server 6.5 to SQL Server 7. This change is recommended by Peoplesoft in order to support Phase 3 of the project. This enhancement provides greater speed and stability to the Peoplesoft product.
- **Phase 3** Upgrade to Peoplesoft 7.5 from 6. Peoplesoft version 6 was no longer supported by Peoplesoft after August 1999. Version 7.5 offers improved functionality and an easier path to future upgrades.
- **Phase 4** Add functionality to Peoplesoft. This includes the implementation of a budgets module for Peoplesoft, to enable all budgets and forecasts to be prepared within the accounting system.



3.15.3 Accordingly, Epic Energy submits that this item satisfies the 8.16 test.

3.16 Information Management System.

3.16.1 The Regulator concluded that no justification or details of costs were provided for expenditure on the information management system. However, the Regulator accepted the proposed Capital Expenditure for the purposes of the Draft Decision. In addition, it was noted that more rigorous justification would need to be provided before actual expenditure on this item would be added to the Capital Base.

3.16.2 The item relates to the creation of a document management system and file structure which has the following benefits :

- Improve EPIC' s file directory structures on the LAN, so end-users can easily find and share information.
- Reduce administration overhead involved with the current directory structure.
- Enhancement of the security structure and administration for the file system.
- Establish a document repository that enables easier version control, document access and ensures security of documents
- Provide a tool that can effectively support the document repository in the storing of documents and that can also help streamline the document management processes
- Enable the business to publish documents online with minimal IT involvement
- Better facilitate remote access to source documents
- Enhance data ownership via improved data goveranace

3.16.3 Accordingly, Epic Energy submits that this item satisfies the 8.16 test.

**Category Two Issue In Relation to Capital Expenditure:**

3.17 In the draft decision, the Regulator stated that the following expenditure items are reasonable and likely to pass the section 8.16 test and therefore will be included as part of Epic Energy's forecast capital expenditure for the purposes of deriving the total revenue for the first access arrangement period:

- SCADA master station CS6, 9 visibility
- Motor vehicles
- Tools and equipment
- Inventory management
- Emergency response caravan
- Buildings
- Security systems
- Fitness for purpose project
- Corrosion protection upgrades

- 3.18 In addition, the Regulator also concluded that the other items classified in Epic Energy's proposed access arrangement as "Other Expenditure" were either not justified at all or poorly justified (see category 1 issue items above).
- 3.19 For the reasons explained in section 2 of this paper, Epic Energy considers that all the forecast capital expenditure items that are classified by Epic Energy as "Other Expenditure" in its proposed access arrangement (which includes the above capital expenditure items), fall within the definition of forecast New Facilities Investment.
- 3.20 Alternatively, if the Regulator does not accept Epic Energy's reasoning in section 2, he should at least conditionally allow it pending the implementation of the New Facilities Investment Code change proposal in the Code.

**Category Three Issue in Relation to Capital Expenditure:**

- 3.21 Flood Damage Mitigation:
- 3.21.1 In the Draft Decision the Regulator stated that he considered the ongoing nature of the flood damage mitigation works was reason to consider the cost of such works as a non capital cost.
- 3.21.2 Epic Energy advises that 100% of the expenditure indicated for this item is capital associated with the prevention of or minimisation of future flood damage. The repair of pipeline flood damage is not included in the item. The ongoing nature of such capital expenditure merely reflects the annual and geographical variability of weather conditions meaning, that all areas subject to flood damage are not revealed at the one time.
- 3.21.3 As such in Epic Energy's opinion, the flood damage mitigation works clearly meet the test in section 8.16 and condition 8.16(b)(iii) is satisfied.
- 3.22 Mainline Valve and Repeater Sites – GEA Upgrades:
- 3.22.1 In the Draft Decision the Regulator stated that on the basis of technical advice, the Regulator considers the expenditure to be justified, but to be in the nature of a non capital cost.
- 3.22.2 Epic Energy advises that it accepts the Regulator's Draft Decision in respect of this item.
- 3.23 Maintenance Costs of Tools and Equipment:
- 3.23.1 The Regulator concluded that he was not provided with information on costs of tools and equipment to enable an assessment of the reasonableness of the costs. However, he considered that the purchase of tools can be reasonably regarded as a necessary expenditure and as the cost is relatively small, he considered that it

may reasonably be expected to pass the tests of section 8.16 of the Code.

- 3.23.2 Nevertheless, he considered that costs of maintaining tools and equipment should be considered as an operating cost and be taken into account in the determination of Reference Tariffs as a Non Capital Cost. The Regulator therefore requires the forecast capital expenditure to be revised in accordance with the following costs for tools and equipment (1999 dollar values):

2000 / 2001 / 2002 / 2003 / 2004

0.23 / 0 / 0 / 0 / 0

- 3.23.3 Epic Energy considers that it has correctly treated this expenditure as being of a capital nature in accordance with Australian accounting standard AASB 1021. Section 7 of that standard provides as follows:

**7 Spares for Plant and Equipment**

*7.1 Spares purchased specifically for a particular asset, or class of assets, and which would become redundant if that asset or class was retired or use of that asset or class was discontinued, must be considered to form part of the historical cost of that asset or class. The depreciable amount of such spares must be allocated over the useful life of the asset or class.*

*7.1.1 Spares that can be used only in connection with a particular non-current asset do not have useful lives of their own. They are depreciated over the useful life of the related asset.*

*7.1.2 Spares can be distinguished from stores and supplies, which would generally be consumed on an ongoing basis and are dealt with in Accounting Standard AASB 1019 "Measurement and Presentation of Inventories in the Context of the Historical Cost System". Spares can also be distinguished from separate components of an asset that have their own useful lives and are discussed at paragraphs 5.7.3 and 5.7.4 of this Standard.*

**3.24 Inventory Management:**

- 3.24.1 In the Draft Decision the Regulator stated that he is of the view that this expenditure should be treated as an operating expenditure.

- 3.24.2 Epic Energy advises that strategic parts are maintained by or on behalf of prudent pipeline operators to ensure that service availability can be maintained. For example, the compressor dry seal cartridge held in store is just as much part of the pipeline equipment required to deliver gas at high availability as is the equivalent cartridge in service.

The cartridge in store is ensuring that a failure in operating equipment can be quickly repaired and restored to service.

- 3.24.3 Epic Energy correctly treats this expenditure as being of a capital nature in accordance with section 7 of Australian accounting standard AASB 1021, the text of which is outlined above.

**Category Four Issue in Relation to Capital Expenditure:**

3.25 Turbine/Compressor Upgrades (stage 3A enhancement)

- 3.25.1 The Regulator notes that Epic Energy embarked on the Stage 3A enhancement in response to requests for additional capacity, and that Epic Energy is placed under an obligation to provide such additional costs by s5 of schedule 1 of the Dampier to Bunbury Pipelines Act. As such, the Regulator accepts for the purposes of this draft decision that the forecast capital expenditure is reasonably likely to meet the requirements of section 8.16 of the Code.
- 3.25.2 Notwithstanding the reasonable expectation that the expenditure for the stage 3A enhancement would pass the tests of section 8.16 of the Code, the Regulator has decided to incorporate the cost of construction and commissioning of compressors at CS2 and CS7 of \$19.487 million into the valuation of the ICB as at 31/12/99. This stance was taken in recognition of the bulk of the works associated with the forecast 2000 expenditure actually haven been undertaken in 1999, and hence inclusion of this expenditure in the ICB being consistent with the capacity of the DBNGP at the time of valuation.
- 3.25.3 The Regulator will therefore require the forecast Capital Expenditure to be revised in accordance with the following costs for the turbine/compressor upgrades (31/12/99) dollar values:
- |  |
|--|
| 2000 / 2001 / 2002 / 2003 / 2004 / TOTAL |
| 0.70 / 1.30 / 1.40 / 0 / 0 / 3.40        |
- 3.25.4 Epic Energy accepts that the cost of construction and commissioning of compressors at CS2 and CS7 of \$19.487 million should be included as part of the valuation of the initial Capital Base.

## **4 Feasibility of Aggregation Downstream of Kwinana Junction**

### **4.1 Draft Decision Amendment 78 stated as follows:**

“Clause 7 of the Access Contract Terms and Conditions should be amended to provide for a User’s liability for the Peaking Surcharge to be assessed on the basis of that User’s Maximum Hourly Quantity and hourly delivery of gas in aggregate across all of that User’s Delivery Points in a pipeline zone”.

### **4.2 The above Amendment 78 is unacceptable for the following reasons:**

#### **PIPELINE CAPABILITY**

4.3 The proposed amendment assumes that all components of the pipeline system, including the main trunk line, laterals and metering and regulating stations have about the same peaking capability. However, in reality, this is not the case. As a result, the proposed amendment, if implemented, will force Epic Energy to operate the pipeline in such a manner that will adversely impact on the Pipeline’s capability, to the extent that it will force Epic Energy to be in breach of its obligations under some of its existing contracts. This demonstrates that this amendment fails to take into account the operational and technical requirements necessary for the safe and reliable operation of the DBNGP. Furthermore, if it is included in the access arrangement to be approved by the Regulator, the Regulator will be in breach of section 2.25 of the Code. The reasons supporting this conclusion are outlined below.

4.4 First, the capability of the pipeline system (including its capacity) is determined by a number of factors although, principally by reference to the pressure that Users and/or Prospective Users require the gas to be delivered at relevant delivery stations. Users require gas to be delivered at these delivery stations at differing pressure levels. Therefore, different delivery points within each pipeline zone may be connected and supplied via different laterals that have differing capabilities. This is particularly the case in relation to the pipeline system in zone 10.

4.5 This is most clearly demonstrated in attachment 1 to the proposed Access Arrangement Information. Tables 4 and 5 of Attachment 1 are reproduced below in order to show the different physical characteristics of the mainline and laterals:

**TABLE 4**

**MAIN LINE: PHYSICAL CHARACTERISTICS**

<b>SECTION: DAMPIER TO KWINANA JUNCTION</b>		
Length	1,311.2km	87.4km
Nominal size	660mm	660mm
Wall thickness	8.74mm	12.7mm
Steel type	API 5LX 65 DSAW	API 5LX 65 DSAW
MAOP	8,480kPa (gauge)	8,480kPa (gauge)
<b>SECTION: KWINANA JUNCTION - WLPG PLANT – KWINANA JUNCTION</b>		
Length	6.4km	
Nominal size	660mm	
Wall thickness	14.27mm	
Steel type	API 5LX 65 DSAW	
MAOP	8,480kPa (gauge)	
<b>SECTION: KWINANA JUNCTION TO MAIN LINE VALVE 141</b>		
Length	10.8km	
Nominal size	500mm	
Wall thickness	7.94mm	
Steel type	API 5LX 65 DSAW	
MAOP	6,890kPa (gauge)	
<b>SECTION: MAIN LINE VALVE 141 TO MAIN LINE VALVE 150</b>		
Length	73.5km	
Nominal size	500mm	
Wall thickness	5.56mm	
Steel type	API 5LX 65 DSAW	
MAOP	6,890kPa (gauge)	
<b>SECTION: MAIN LINE VALVE 150 TO MAIN LINE VALVE 154</b>		
Length	23.9km	
Nominal size	250mm	
Wall thickness	4.80mm	
Steel type	API 5LX 52 ERW	
MAOP	6,890kPa (gauge)	
<b>SECTION: MAIN LINE VALVE 154 TO MAIN LINE VALVE 157A</b>		
Length	16.9km	
Nominal size	200mm	
Wall thickness	4.80mm	
Steel type	API 5LX 52 ERW	
MAOP	6,890kPa (gauge)	

**TABLE 5  
GAS TRANSMISSION SYSTEM LATERALS**

SECTION: CS10 TO ROCKINGHAM LATERAL PIPELINE (ROCKINGHAM LATERAL LINK)				
Length	0.18km			
Nominal size	600mm			
Wall thickness	12.65mm			
Steel type	API 5LX 70 ERW			
MAOP	6,890kPa (gauge)			
SECTION: MAIN LINE VALVE 150 TO MAIN LINE VALVE 154 (LOOPLINE)				
Length	24.3km			
Nominal size	450mm			
Wall thickness	6.35mm			
Steel type	API 5LX 60 ERW			
MAOP	8,280kPa (gauge)			
HAMERSLEY IRON				
Length	0.5km			
Nominal size	200mm			
Wall Thickness	6.4mm			
Steel Type	API 5LX 52 ERW			
MAOP	8,480kPa (gauge)			
CARNARVON				
Length	163.7km	7.4km		
Nominal size	150mm	150mm		
Wall Thickness	4.8mm	6.4mm		
Steel Type	API 5LX 42 ERW	API Grade B ERW		
MAOP	8,480kPa (gauge)	1,900kPa (gauge)		
MUNGARRA				
Length	2.5km			
Nominal size	150mm			
Wall Thickness	6.4mm			
Steel Type	API 5L Grade B ERW			
MAOP	8,480kPa (gauge)			
PINJAR				
Length	14.2km			
Nominal size	350mm			
Wall Thickness	7.1mm			
Steel Type	API 5LX 52 ERW			
MAOP	8,480kPa (gauge)			
RUSSELL ROAD				
Length	7.3km			
Nominal size	300mm			
Wall Thickness	9.5mm			
Steel Type	API 5LX 46 ERW			
MAOP	6,890kPa (gauge)			
KWINANA WEST				
Length	2.0km	2.8km	1.5km	
Nominal size	500mm	350mm	200mm	
Wall Thickness	7.9mm	9.5mm	8.7mm	



# PROPOSED ACCESS ARRANGEMENT

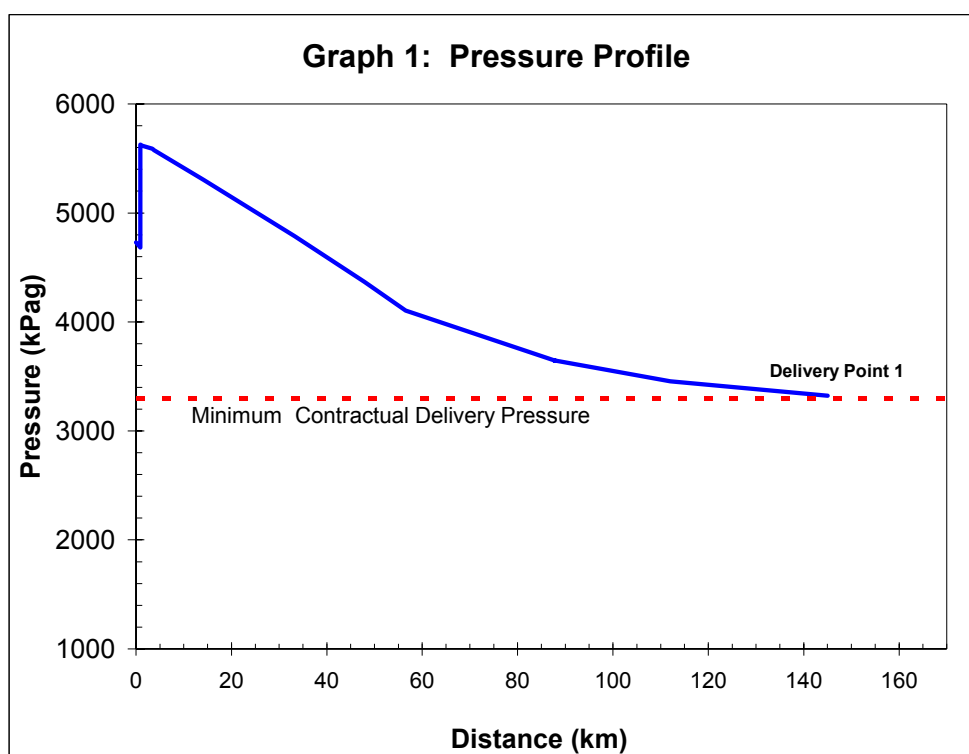
## Court Decision Additional Paper CDAP #2 Supplementary Response to Draft Decision Amendments

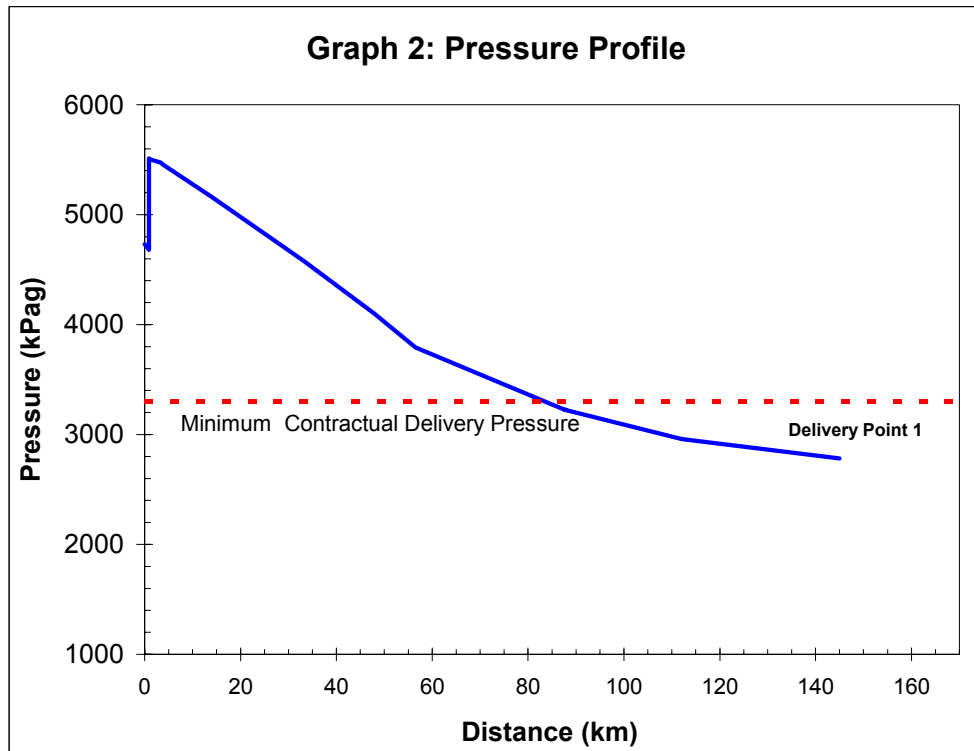
Steel Type MAOP	API 5LX 65DSAW Grade B ERW 6,890kPa (gauge)	API 5LX 52 ERW 6,890kPa (gauge)	API 6,890kPa (gauge)
<b>ROCKINGHAM</b>			
Length	3.2km	2.6km	
Nominal size	300mm	150mm	
Wall Thickness	9.5mm	6.4mm	
Steel Type	API 5LX 46 ERW	API 5L Grade B ERW	
MAOP	6,890kPa (gauge)	6,890kPa (gauge)	
<b>KNC/BP (Part of Rockingham Lateral Located Downstream of Mason Road Delivery Station)</b>			
Length	1.6km		
Nominal size	250mm		
Wall Thickness	9.3mm		
Steel Type	API 5LX 42 ERW		
MAOP	6,890kPa (gauge)		
<b>COGEN (Part of Rockingham Lateral Located Downstream of Cogen Delivery Station)</b>			
Length	0.9km		
Nominal size	200mm		
Wall Thickness	8.2mm		
Steel Type	API 5LX 42 ERW		
MAOP	6,890kPa (gauge)		
<b>TiWEST COGENERATION LATERAL (Part of Rockingham Lateral)</b>			
Length	0.58km		
Nominal size	150mm		
Wall Thickness	7.1mm		
Steel Type	API 5LX 42 ERW		
MAOP	6,890kPa (gauge)		
<b>ALCOA PINJARRA</b>			
Length	2.5km	2.9km	
Nominal size	300mm	300mm	
Wall Thickness	7.1mm	9.5mm	
Steel Type	API 5L Grade B ERW	API 5LX 52 ERW	
MAOP	6,890kPa (gauge)	6,890kPa (gauge)	
<b>ALCOA WAGERUP</b>			
Length	8.0km	1.5km	
Nominal size	350mm	350mm	
Wall Thickness	7.1mm	9.5mm	
Steel Type	API 5L Grade B ERW	API 5LX 42 ERW	
MAOP	6,890kPa (gauge)	6,890kPa (gauge)	
<b>WORSLEY</b>			
Length	32.9km		
Nominal size	250mm		
Wall Thickness	4.8mm		
Steel Type	API 5LX 52 ERW		
MAOP	6,890kPa (gauge)		
<b>SOUTH WEST COGENERATION LATERAL</b>			
Length	32.9km		
Nominal size	450mm		

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Wall Thickness	6.35mm
Steel Type	API 5LX 60 ERW
MAOP	8,280kPa (gauge)

- 4.6 These laterals and the connected delivery points will have different pipeline and peaking capacities. Aggregating the permissible Maximum Hourly Quantity from one Delivery Point on a higher capacity lateral to another Delivery Point on a lower capacity lateral would place the system's (or at least the lower capacity lateral's) integrity at risk of impairment. The worst result is when the lower capacity lateral is operating only to its design capability.
- 4.7 The following example shows that aggregating Maximum Hourly Quantity will impact on pipeline system integrity. The first graph shows pressure for the Mainline South system with shippers taking their maximum permissible hourly quantity. The second graph shows the impact of transferring additional hourly quantity entitlements from a delivery point upstream of the Mainline South system to Delivery Point 1 located on a smaller diameter lateral connected to the Mainline South system. (For demonstration purposes, other outlet points and laterals are not shown in this example). This would cause the delivery pressure at Delivery Point 1 to fall below the contractual minimum pressure limit which may in turn cause the interruption of gas supply to the customer. The falling pressure is due to the design capacity of the lateral and mainline being exceeded. In this example, both the mainline and the lateral capacity can not support the aggregation of the design throughput plus the additional maximum hourly quantity from another upstream delivery point. Also the physical capacity of the delivery station may also be exceeded (more detailed on this later).





#### DELIVERY POINT PHYSICAL CAPABILITY

- 4.8 The overall capacity of a delivery station is designed and constructed to meet the agreed contractual limits. Aggregating maximum hourly quantity by transferring the hourly load allocated to one delivery point to another may result in the capacity of the delivery point to be exceeded. This may lead to equipment failure or impact on the operational integrity of the delivery stations, in particular the metering and regulating equipment.

## **5 Additional Information to Response to Draft Decision Amendment 74**

### **5.1 Draft Decision Amendment 74 stated as follows:**

“The proposed Access Arrangement should be amended to provide for maximum rates of the Out of Specification Gas Charge, Nomination Surcharge, Excess Imbalance Charge and Peaking Surcharge to be 350 percent of the relevant 100 percent load factor Reference Tariff”.

### **5.2 The Amendment should be rejected for the following reasons:**

### **5.3 The imposition of surcharges in the situations proposed in the Access Arrangement is directed at correcting behavioural attitudes to ensure all users of the system get the maximum benefit available. It is not an issue of cost recovery as appears to have been accepted by the Regulator in the draft decision for the Parmelia Pipeline Access Arrangement. Generally the matters addressed by such surcharges are to deal with breaches Epic Energy can only become aware of after they have occurred and is not able to take preventative action. That aspect coupled with the general reluctance amongst pipeline operators to shut off gas supply to a breaching Shipper, dictates the importance and need for higher amounts to deter unsatisfactory behaviour. The \$15/GJ surcharge rate is comparable to current price for distillate which ranges from \$12-\$15/GJ with government rebate and \$20/GJ without rebates.**

### **5.4 It should be pointed out the impact of excessive imbalance or hourly peak flows can have a catastrophic consequence on the integrity of the pipeline system. The following example shows the impact on Kwinana Junction pressure due to prolonged maximum hourly quantities above the permissible level (as proposed by Epic Energy) for this Delivery Point. In the first graph, the system performs to its design conditions by supporting maximum hourly quantity of up to 120%. In the second graph, the maximum hourly quantity is increased to 125% while keeping the total daily throughput at the same level as the first graph. The results show that the pipeline pressure collapsed at the end of Day 1. This would result in interruption to all customers downstream of Kwinana Junction.**

