

DAMPIER TO BUNBURY NATURAL GAS PIPELINE

PROPOSED ACCESS ARRANGEMENT UNDER THE NATIONAL ACCESS CODE

Additional Paper 8: Comparison of Access Manual and Proposed Access Arrangement

9 April 2001

Epic Energy (WA) Transmission Pty Ltd
ACN 081 609 190
Level 7
239 Adelaide Terrace
PERTH WA 6000
CONTACT: David Williams

CONTACT: David Williams TELEPHONE: 9492 3823



1. Introduction

- 1.1 A number of interested parties have made submissions to the Western Australian Independent Gas Pipelines Access Regulator ("the Regulator") on Epic Energy's proposed Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline ("the DBNGP"). In Epic Energy Submissions 4 9, Epic Energy commented on issues raised in those submissions, and indicated that, where it was unable to provide detailed comment on issues raised, or had not provided comment in earlier submissions, it would endeavour to deal with those issues in further papers to the Regulator.
- 1.2 The submissions interested parties have made to the Regulator have not only commented on the proposed DBNGP Access Arrangement. They have also compared aspects the Access Arrangement proposals with similar elements in the prior access regimes of the *Gas Corporation Act 1994* and the *Gas Transmission Regulations 1994*, and the *Dampier to Bunbury Pipeline Act 1997* ("the DBPA") and the *Dampier to Bunbury Pipeline Regulations 1998* ("the DBPRs"). The transitional access regime of the DBPA and the DBPRs ("the transitional access regime") replaced the earlier access regime of *Gas Corporation Act 1994* and the *Gas Transmission Regulations 1994* at the time Epic Energy acquired the DBNGP. 1
- 1.3 The terms and conditions of access applying under the transitional access regime of the DBPA and the DBPRs are, in the main, set out in the Access Manual ("AM"), which was approved by the Coordinator of Energy, in accordance with clause 3(1) of Schedule 1 of the DBPA, on 10 March 1998. That AM was prepared by the Government of Western Australia as part of the DBNGP sale process. Epic Energy had no part in its development, and simply inherited the AM upon its acquisition of the DBNGP. As noted above, the AM was part of the transitional access regime effective from the time of Pipeline sale, and was not intended to bind Epic Energy in any way, with respect to arrangements which Epic Energy might adopt under future access regimes. The AM has not been amended since 10 March 1998.
- 1.4 In this Additional Paper 8, Epic Energy makes a systematic and comprehensive comparison of the proposals of the DBNGP Access Arrangement with the Access Manual. The comparison is made in terms of:
 - pipeline capacity (section 2 and Attachment 1);
 - gaining access to capacity (section 3 and Attachment 2);
 - operational arrangements (section 4 and Attachment 3);
 - technical matters (including gas quality) (section 5 and Attachment 4);
 - access terms and conditions (section 6 and Attachment 5);
 - access prices (section 7 and Attachment 6); and
 - capacity trading and the secondary market (section 8 and Attachment 7).

The access regime of the DBPA and the DBPRs is referred to as the "repealed access regime" in clause 9(3) of Schedule 3 to the *Gas Pipelines Access (Western Australia) Act 1998*.



- 1.5 In each attachment, the relevant provisions of the Access Manual (and, where appropriate, from the DBPRs) are juxtaposed with the corresponding provisions from the proposed DBNGP Access Arrangement ("AA") or its related documents. These related documents are:
 - the Access Arrangement Information ("AAI");
 - the Access Contract Terms and Conditions ("ACTC");
 - the Access Guide ("AG");
 - the Secondary Market Rules ("SMR"); and
 - the Secondary Market Terms and Conditions "SMTC").

The proposed DBNGP Access Arrangement ("AA") and its related documents are referred to collectively in this additional paper as "the proposed DBNGP Access Arrangement".

1.6 Although the comparisons of the Attachments are comprehensive, not all of the provisions of every source document have been listed, and many of the provisions that have been listed are presented in summarised form. For purposes other than the comparisons of this Additional Paper 8, reference must be made, as appropriate, back to the Access Manual (and, in some cases, to the DBPRs), to the proposed DBNGP Access Arrangement, and to the documents related to the proposed Access Arrangement, for the full text of each provision, and for its context.



2. Pipeline Capacity

- 2.1 The transitional access regime of the DBPRs and the Access Manual imposes a relatively prescriptive approach to the definition and determination of the capacity of the DBNGP to transport gas.
- 2.2 Regulation 10 of the DBPRs defines pipeline capacity as "full haul capacity", the capacity of the DBNGP to transport gas downstream of Compressor Station 9. Full haul capacity is divided into three tranches. On a continuum from zero:
 - Tranche 1 capacity is the capacity between zero and the T1 cutoff;
 - Tranche 2 capacity is the capacity between the T1 cutoff and the T2 cutoff; and
 - Tranche 3 capacity is the capacity in excess the T2 cutoff.
- 2.3 The T1 cutoff and the T2 cutoff are determined from a probabilistic analysis of pipeline system reliability. (The method is described in Epic Energy's response to OffGAR's Information Request 11: *Probability of Supply of Firm Service.*) The T1 cutoff is the quantity of capacity that is available (in the absence of major works) with a probability of at least 98%. The T2 cutoff is the quantity of capacity that is available (in the absence of major works) with a probability of at least 92%.
- 2.4 Different T1 and T2 cutoffs apply at different times during the year because the thermal efficiency of compressor units varies inversely with ambient temperature. Compressor unit efficiencies are higher in cooler winter months, than in summer. The Access Manual therefore specifies two seasons: summer (from 1 November to 1 May), and winter (from 1 May to 1 November). The T1 cutoffs and T2 cutoffs for these two seasons (and the corresponding Tranche 1 and Tranche 2 capacities) are shown in Table 2.1.

Table 2.1 T1 and T2 Cutoffs and Tranche 1 and Tranche Capacities (after Stage 3A)

	Summer	Winter
T1 cutoff T2 cutoff	495 TJ/day 556 TJ/day	511 TJ/day 581 TJ/day
Tranche 1 capacity Tranche 2 capacity	495 TJ/day 61 TJ/day	511 TJ/day 70 TJ/day

- 2.5 Under the transitional access regime, the Pipeline's firm service is provided from its Tranche 1 capacity. Capacity in Tranche 3 is fully interruptible. Capacity in Tranche 2 is available for a service which is less reliable than service provided from Tranche 1 capacity, but is more reliable than the fully interruptible service.
- 2.6 The proposed DBNGP Access Arrangement does not continue the tranche structure of capacity used in the transitional access regime. Epic Energy's

intention to change to a more conventional approach to the definition and determination of Pipeline capacity was indicated in Schedule 39 of the DBNGP Asset Sale Agreement. The Tariff Principles of Schedule 39 of that Agreement advised that, from 1 January 2000, the tranche methodology would not be used to define the capacity of the Pipeline.

- 2.7 In preparing its bid for the DBNGP, Epic Energy recognised that, if a conventional approach were taken to the determination of pipeline capacity, it could more efficiently utilise the asset. If Epic Energy, as owner of the Pipeline, were to accept the operating risks normally accepted by North American pipeline operators, an increment in capacity for the delivery of a firm service was available at no additional cost and no significant increase in risk to shippers. The increment in capacity was, however, available only through the "rebalancing" of operator risk and service levels which was subsequently set out as a total package in Schedule 39 of the DBNGP Asset Sale Agreement. The determination of Pipeline capacity was not a matter that stood independently of other aspects of DBNGP operation.
- 2.8 Epic Energy's approach to the determination of capacity available for the firm service reference service of the proposed DBNGP Access Arrangement is set out in paragraph 2.1 of the AAI. Capacity available for the provision of firm service is to be the capacity available assuming January average conditions. With the current configuration of pipe and compressors, that capacity is 605 TJ/d.
- 2.9 As discussed in Epic Energy's response to OffGAR's Information Request 11, defining the capacity available for firm service as the January average capacity introduces a definition of capacity which is qualitatively different from the definition of capacity under the transitional access regime. There is no unique probability of supply for firm service corresponding to the probability of 98% which defines the T1 cutoff. This does not imply a reduction in service quality. Coupled with the liability provisions of the proposed DBNGP Access Arrangement (discussed in section 6 below), it creates strong incentives for Epic Energy to tightly manage its maintenance activities to ensure that the total capacity for firm service is available at critical times during the year (during summer and, in particular, in January, and during other periods of high gas demand).
- 2.10 Ambient temperatures are, on average, highest during January, and the thermal efficiency of compressor units on the DBNGP is, in consequence, lowest during the month. Pipeline capacity determined assuming January average conditions is, therefore, lower than the capacity determined using average conditions for any other month. Under the proposed Access Arrangement, Epic Energy intends to offer, in each month, capacity above the capacity determined assuming January average conditions, up to the capacity determined assuming average conditions for the month, as a (non-reference) seasonal service.
- 2.11 On average, some additional capacity will be available, over and above the capacity determined assuming average conditions for each month. Epic Energy proposes making this capacity available to shippers, together with any other "uncontracted" capacity available on a day, through the proposed secondary market.



2.12 Given the significantly higher level of capacity available for firm service, the amount of capacity Epic Energy expects to make available for seasonal service, and for secondary market service, will be lower than the amounts available for T3 service and for spot access under the transitional access regime. However, shippers will also be able to offer, on the secondary market, contracted capacity additional to their requirements on a day, boosting the capacity available to meet short term increases in demand for gas transportation service.

epicenergy

PROPOSED ACCESS ARRANGEMENT Additional Paper 8: Comparison with Access Manual

3. Gaining Access to Capacity

- 3.1 Under both the AM, and the proposed DBNGP Access Arrangement, access to Pipeline capacity requires an access contract, and an access contract is obtained by making a successful application. An application, in accordance with the proposed Access Arrangement, is to be made on the access request form shown in the AG.
- 3.2 If spare capacity is available, an application for that capacity is, under both the AM and the proposed Access Arrangement, to be lodged at least 30 days before the date on which access is to commence. An application for capacity which Epic Energy must develop is to be submitted a reasonable time before the date on which access is to commence.
- 3.3 The access request form which must be submitted under the proposed DBNGP Access Arrangement requires information similar to that which must be included in an application under the AM. Paragraph 5.2(b) of the proposed Access Arrangement does, however, permit Epic Energy to request such further detail and information as it reasonably considers necessary to process an access request. There is no similar provision in the AM. This is a shortcoming of the scheme of the AM. Experience with the operation of the transitional access regime, and its predecessor, shows that the requirements and circumstances of prospective shippers seeking access to gas transportation services vary considerably. Prescription of the type found in the AM, without reasonable flexibility to address the circumstances of particular cases, results in prospective shipper frustration at the time Epic Energy is seeking to establish a good business relationship with a new customer.
- 3.4 Clause 20 of the AM permits Epic Energy to seek reimbursement from a prospective shipper for all reasonable expenses incurred in processing an application. These expenses are substantial, and include both the cost of the time taken by Epic Energy staff in processing the application, and the cost of external engineering and legal advice in relation to the proposed access contract. The cost of staff time is included in the non-capital costs of the proposed Access Arrangement. The costs of external engineering and legal advice are costs additional to those from which the reference tariff has been determined, and can vary considerably depending on the extent to which the access contract is to incorporate features specific to a particular shipper. Epic Energy has sought to provide a simple and equitable method for its recovery of the costs of processing an application by requiring, in the proposed DBNGP Access Arrangement, payment of a non-refundable prescribed fee of \$5,000 at the time of the application is lodged.
- 3.5 Applications are, under both the transitional access regime and the proposed DBNGP Access Arrangement, to be processed by Epic Energy in the order in which they are received (a first come, first served queuing policy).
- 3.6 Both the transitional access regime, and the proposed Access Arrangement, require of Epic Energy that it assess an application to the standard expected of a reasonable and prudent pipeline operator.



- 3.7 In each case, a number of conditions precedent must be satisfied before Epic Energy can enter into an access contract in response to an application from a prospective shipper. The conditions precedent include:
 - there is sufficient spare capacity in the DBNGP, or enhancement or expansion of the Pipeline is economically viable;
 - the requested capacity can be accommodated having regard to the load characteristics of the prospective shipper and the load characteristics of shippers; and
 - the prospective shipper is in a position to meet its financial obligations under an access contract.

The conditions precedent of the proposed DBNGP Access Arrangement are somewhat less prescriptive than those of the AM. However, the AM permits Epic Energy, in its discretion as a reasonable and prudent person, to waive one or more of the conditions precedent.

- 3.8 The AM provides explicitly for non-compliance with the conditions precedent. In the event of non-compliance, Epic Energy is to give notice to the prospective shipper, who may then elect to enter into negotiations to amend the application. If the amended application is not materially different from the original application, the amended application retains the priority of the original. If, however, the amended application is materially different and, because of that, an application of lower priority is prejudiced, the original application is rejected, and the applicant is treated as having resubmitted the application with the amended application having the priority accorded to it at the time of resubmission.
- 3.9 A simpler scheme for amendment is included in the proposed DBNGP Access Arrangement. A prospective shipper may amend an application at any time prior to its acceptance by Epic Energy. If the amendment is limited to a reduction in the capacity requested, or is not, in Epic Energy's opinion, a material change, the amended access request retains its priority in the queue. If, however, the amendment is of material effect, and the access request of another prospective shipper is prejudiced, the amended access request is deemed to be a new access request lodged on the date of its being received by Epic Energy.
- 3.10 Both the AM and the proposed DBNGP Access Arrangement permit a prospective shipper to withdraw an application at any time before its acceptance by Epic Energy. In the circumstances, the application's priority is lost and, in the case of the scheme of the proposed Access Arrangement, any refund of the prescribed fee is at Epic Energy's discretion.
- 3.11 The provisions of the AM, and of the proposed DBNGP Access Arrangement, establishing the way in which a shipper is to gain access to Pipeline capacity, include a critically important provision relating to the duration of an access contract. Under the scheme of the AM, the minimum duration of an access contract for T1 (or T2) service is three months. In accordance with the proposed Access Arrangement, the minimum duration of a contract for firm service is five years. This longer duration is, in Epic Energy's view, entirely appropriate given the need for both shippers and Epic Energy to protect



substantial investments in facilities which have no alternative uses. Epic Energy notes that, although both the AM and the prior access regime of the *Gas Transmission Regulations 1994* permit a minimum contract duration of three months, shippers have generally sought contract durations of five years or longer.

- 3.12 Gas transmission pipelines, and the facilities owned by users of gas supplied directly from those pipelines (unlike the facilities of many of the users of gas supplied from distribution pipelines), have design attributes specific to the quantity and quality of gas to be delivered. Where investments in pipelines and user facilities are relationship-specific, long term (rather than short term) contracts are the norm. Long term contracts protect the owners of relationship-specific facilities from the risk of expropriation of the value of those facilities in circumstances of frequent renegotiation. In the gas industry, these long term contracts may have durations of 20 years or more. Epic Energy considers five years to be reasonable as the duration of a long term contract for provision of the DBNGP reference service, and notes that prospective shippers are not precluded from negotiating contracts of shorter duration.
- 3.13 The scheme of the AM for gaining access to capacity includes a number of elements not included in the proposed DBNGP Access Arrangement. An application under the AM may:
 - specify, for inclusion in the access contract, mechanisms for flexible start and end times; and
 - request a conditional access contract.

Neither flexible start and end times, nor conditional access, is precluded under the proposed Access Arrangement. Epic Energy has previously commented on conditional access in section 4 of *Epic Energy Submission 9: Gaining Access to the DBNGP*. That section concluded that the relevant provision of the AM (clause 43) added little beyond permitting agreement on conditional access. Nothing prevents such agreement from being reached under the proposed DBNGP Access Arrangement. In contrast to the prescriptive nature of the scheme of the AM, the *National Third Party Access Code for Natural Gas Pipeline Systems* ("the Code") and the proposed DBNGP Access Arrangement permit flexibility in dealing with the particular circumstances of individual shippers

3.14 The proposed Access Arrangement, like the AM, contemplates a party being approved for the purpose of its entering into an access contract, but not proceeding to a contract at the time of application. Under the AM, such a party is referred to as an approved prospective shipper. Under the proposed Access Arrangement, the party is referred to as an approved third party. In each case, an approved party is a party who meets the conditions precedent pertaining to ability to meet financial obligations under an access contract. In consequence, an approved prospective shipper may, in accordance with the scheme of the AM, submit an application with a reduced lead time, and may participate in capacity trading. Under the scheme of the proposed Access Arrangement, an approved third party may participate in the secondary market.



- 3.15 Tradeable capacity expansion options are an innovative mechanism for making capacity available to prospective shippers under the proposed DBNGP Access Arrangement. When exercised, an option creates a right to a given quantity of capacity at a specified future date. It does so independently of, and in priority to, rights created by Epic Energy's acceptance of an access request from a prospective shipper. Some aspects of the proposed scheme of capacity expansion options are discussed in section 7 of Epic Energy's *Submission 9: Gaining Access to the DBNGP*. There is no equivalent to the scheme of capacity expansion options in the AM.
- 3.16 The AM does, however, facilitate Epic Energy making available the unutilised capacity of a shipper to other shippers, thereby avoiding unnecessary expansion of the DBNGP. It does so by permitting shippers to offer capacity for relinquishment, and by authorising Epic Energy to accept capacity which has been offered. Acceptance of an offer to relinquish capacity is to be in Epic Energy's absolute and unfettered discretion. Although the proposed DBNGP Access Arrangement does not explicitly provide for shipper relinquishment of capacity, nothing would preclude a shipper from proposing, and Epic Energy accepting, a relinquishment of capacity. Again, the same outcome can be achieved under the Code and the proposed Access Arrangement without the prescription of the scheme of the AM.
- 3.17 In summary, the AM and the proposed DBNGP Access Arrangement include quite similar schemes for gaining access to Pipeline capacity. The two schemes do, however, differ significantly in their requirements for duration of the access contract. More importantly, through its proposal for capacity expansion options, the proposed Access Arrangement provides prospective shippers with a mechanism for acquiring capacity under the conditions of uncertainty that typically surround major project development. A shipper can secure, at an early stage, the right to have capacity developed in the future, but need not commit to the development of that capacity until uncertainty surrounding its project has been resolved. Capacity expansion options are not available under the AM.



4. Operational Arrangements

- 4.1 In this section, the operational arrangements of the AM are compared with those of the proposed DBNGP Access Arrangement. The comparison examines:
 - requirement for an electronic bulletin board;
 - receipt point and delivery point flexibility;
 - nominations;
 - balancing;
 - peaking;
 - overrun;
 - curtailment and interruption; and
 - multi-shipper receipt and delivery points.
- 4.2 Submissions made during the two periods in which the Regulator invited comments on the proposed DBNGP Access Arrangement indicated prospective shipper concerns over Epic Energy's proposals for receipt point and delivery point flexibility, nominations, balancing, peaking, and overrun. Epic Energy has already commented on these concerns in previous submissions to the Regulator. In particular, nominations, balancing, peaking and overrun were dealt with in sections 2, 3, 4 and 5 of Epic Energy Submission 6: Reference Service and Other Services. Section 2 of Epic Energy Submission 9: Gaining Access to the DBNGP, dealt with the issue of delivery point flexibility.
- 4.3 The transfer of information between the pipeline operator and shippers is essential for the efficient operation of a gas transmission pipeline.

 Accordingly, both the AM and the proposed DBNGP Access Arrangement provide for this information transfer by means of an electronic bulletin board. In particular, the electronic bulletin board is to be used by Epic Energy to make available to shippers information on gas flows and on capacity expected to be available for nominations or renominations.
- 4.4 An earlier bulletin board, developed as required under regulation 251 of the Gas Transmission Regulations 1994, has now been replaced by a bulletin board module within the new Customer Reporting System ("CRS") which Epic Energy began using for DBNGP operations in September 2000. In addition to providing secure internet-based electronic communication between Epic Energy and shippers, CRS facilitates the making of nominations by shippers, Epic Energy's scheduling of gas deliveries, flow data verification, apportionments of quantities at multishipper receipt points and delivery points, reporting of gas received into the Pipeline and gas delivered from it, and the management of imbalances. CRS has a contracts database and is currently being developed to provide customer billing. Furthermore, in the event that the approved DBNGP Access Arrangement is similar in form to the proposed Access Arrangement, and Epic Energy establishes the secondary market, CRS will be further developed to provide the system functionality required for secondary market transactions. This

epicenergy

PROPOSED ACCESS ARRANGEMENT Additional Paper 8: Comparison with Access Manual

functionality will be developed in accordance with the principles set out in paragraph 4.2 of the proposed Access Arrangement.

- 4.5 To enable Epic Energy to plan its future operations with a degree of certainty, both the AM and the proposed Access Arrangement permit Epic Energy to request, and oblige shippers to provide in good faith, information on likely gas flows at receipt points and delivery points.
- Access Arrangement providing receipt point and delivery point flexibility were discussed in section 2 of Epic Energy Submission 9: Gaining Access to the DBNGP. In that submission, Epic Energy noted that the AM dealt with long term capacity relocation (requiring an amendment to an access contract) as a 'flexibility' issue, and short term flexibility as a nominations issue. The proposed Access Arrangement, in contrast, provided an integrated scheme for receipt point and delivery point flexibility. Otherwise, the two schemes were very similar. Certainly, in respect of short term capacity relocation, the view of some shippers that the scheme of the proposed Access Arrangement is less flexible than that of the AM is without foundation.
- 4.7 The capacity relocation scheme of the proposed DBNGP Access Arrangement explicitly precludes the relocation of capacity to downstream delivery points without Epic Energy's prior written agreement. The reason for this restriction is that, with a given configuration of pipe size and compression, existing contracts exhaust the capacity of some sections of the Pipeline downstream of Kwinana Junction. Any redistribution of flows to downstream delivery points may, in consequence, prevent some shippers from being able to use all of their contracted capacities. To avoid this outcome, Epic Energy must be notified in advance of a downstream capacity relocation so that it can undertake the system modelling studies needed to determine whether the relocation can be made without an adverse impact on other shippers. The relocation scheme of the AM works to achieve the same result, but through a somewhat more complex set of contractual provisions.
- 4.8 In their submissions to the Regulator, prospective shippers expressed concern about a perceived inflexibility in the nominations procedure of the proposed DBNGP Access Arrangement. Epic Energy responded to this concern in section 3 of *Epic Energy Submission 6: Reference Service and Other Services*, concluding that the nominations procedure of the proposed Access Arrangement is more flexible than the procedure of the AM. There are, however, differences between the two.
- 4.9 Nominations, under the proposed Access Arrangement, do not have the status they have under the AM. Under the AM, a shipper is bound by its daily nominations, subject to its having the ability to vary those nominations (by renomination) at fixed times (07:00 hours, 12:00 hours and 20:00 hours) during the day. Under the proposed Access Arrangement, a shipper may exceed its nominations at a delivery point on a day provided the shipper remains within its MDQ for that delivery point. This reduces the contractual importance of nominations. MDQ, not the nomination, governs a shipper's entitlement to have gas transported to a delivery point on a day. Hence, what the shipper has contracted for, and what the shipper is paying a substantial proportion (95%) of the total charge for on a take or pay basis—

contract MDQ - is the shipper's to use as it wishes. Under the AM, the takeor-pay component was 80% or less (currently, less than 73%), and the strict nominations regime is more appropriate. In any event, nominations are an essential input to short term – day by day – planning of DBNGP operations. Compressor units are scheduled for service (and, if necessary, maintenance schedules are altered), to achieve the efficient transportation of the gas to be delivered in accordance with the nominations received.

- 4.10 Because they are necessary for efficient Pipeline operation, the proposed DBNGP Access Arrangement (like the AM) requires that nominations be made in good faith. Nominations are, however, forecasts, and circumstances beyond the control of shippers may prevent those forecasts from being realised. The variation notice mechanism of the proposed Access Arrangement, and Epic Energy's ability to impose a nomination surcharge are intended to apply only in extreme cases where there is a clear breach of the obligation to nominate in good faith. Furthermore, in section 3.4 of *Epic Energy Submission 7: Reference Tariff and Incentive Mechanism*, Epic Energy advised that it intended that revenue received from surcharges, including the nomination surcharge, be treated as rebateable revenue. That is, unlike the case of the AM, the surcharges of the proposed Access Arrangement are not pure "revenue raisers".
- 4.11 Comparison of the balancing provisions of the AM with those of the proposed DBNGP Access Arrangement reveals a number of significant differences. These are:
 - under the proposed Access Arrangement, the first gas delivered by a shipper on a day is deemed to have been used to correct the previous day's (positive) imbalance; and a shipper is deemed not to have supplied gas at receipt points on a day until a negative imbalance from the previous day has been cleared;
 - whereas the AM permits accumulated imbalances below 8%; the proposed Access Arrangement limits imbalances to 2% of shipper's MDQ:
 - shippers have an obligation under the AM to maintain their imbalances below the 8% limit, and there is currently no penalty for the limit being exceeded (save it would amount to a breach of the shipper's contract); under the proposed Access Arrangement, shippers are to use reasonable endeavours to ensure that the 2% limit is not exceeded and, if it is, an excess imbalance charge is payable;
 - the AM permits Epic Energy and a shipper to reach agreement in respect of dealing with imbalances in the event of failure or anticipated failure of the shipper's gas supply;
 - unlike the AM, the proposed Access Arrangement does not explicitly permit shippers to trade imbalances; and
 - under the proposed Access Arrangement, shippers are responsible for making arrangements for imbalance correction; there is no provision for Epic Energy to buy or sell gas to correct shippers' accumulated imbalances and the end of each month.



- 4.12 Shipper concerns arising from a number of these differences were addressed in section 2 of *Epic Energy Submission 6: Reference Service and Other Services*, and the magnitude of the proposed excess imbalance charge was discussed in section 3.4 of *Epic Energy Submission 7: Reference Tariff and Incentive Mechanism*.
- 4.13 In respect of the differences in the balancing arrangements of the AM and the proposed DBNGP Access Arrangement listed in paragraph 4.11 above:
 - Epic Energy views its proposal for clearing, each day, imbalances accumulated on the previous day as a simple and easily implemented way of correcting imbalances (although it does no more, in effect, than the imbalance scheme of the AM), a view confirmed by the lack of adverse shipper comment on the proposal;
 - with the larger quantum of capacity available for firm service under the proposed DBNGP Access Arrangement, the Pipeline's is less able to tolerate high levels of shipper imbalances when capacity is fully utilised, and investigations by Epic Energy indicate a 2% imbalance limit as being appropriate;
 - the proposed Access Arrangement does not preclude Epic Energy and a shipper from reaching agreement in respect of dealing with imbalances in the event of failure or anticipated failure of the shipper's gas supply;
 - the fact that the proposed Access Arrangement does not explicitly permit shippers to trade imbalances is an oversight recognised by Epic Energy in section 2 of *Epic Energy Submission 6: Reference Service and Other Services*, and Epic Energy will not object to a requirement to permit imbalance trading; and
 - Epic Energy is not in the business of buying and selling gas, and maintains that gas supply arrangements for imbalance correction are best left with shippers.
- 4.14 Differences in the peaking arrangements of the AM and the proposed DBNGP Access Arrangement were examined in section 5 of *Epic Energy Submission 6: Reference Service and Other Services*. The three principal differences are:
 - the AM includes a daily peaking limit (5% of a shipper's total contracted capacity in winter, and 3% in summer), but there is no equivalent limit in the proposed Access Arrangement;
 - an hourly peaking limit in the proposed Access Arrangement of 120% of one twenty-fourth of shipper's MDQ at each delivery point, whereas under the scheme of the AM this limit is 120% in summer and 125% in winter across all delivery points; and
 - whereas there is currently no peaking surcharge under the scheme of the AM (although provisions are in place for the introduction of such a surcharge, and Epic Energy would move to introduce a surcharge if the AM were to remain in effect), a surcharge (of \$15 per GJ) is to apply where the hourly peaking limit of the proposed Access Arrangement is exceeded.

epicenergy

PROPOSED ACCESS ARRANGEMENT Additional Paper 8: Comparison with Access Manual

- 4.15 Epic Energy reiterates its earlier comments in respect of these differences:
 - although the peaking limit of the proposed Access Arrangement is somewhat tighter than the winter limit of the AM, the limits of the AM were set in 1994; the Pipeline configuration has changed since 1994, and simulation studies of the system after the Stage 3A enhancement support a limit of 120%; and
 - a surcharge of 15% for breach of a peaking limit is not excessive when compared with the penalty rates adopted by US pipeline operators to deter behaviour that can adversely impact on system performance and, as noted in section 3.4 of *Epic Energy Submission 7: Reference Tariff* and *Incentive Mechanism*, Epic Energy intends, under the proposed Access Arrangement, that any revenue from surcharges be treated as rebateable revenue.
- 4.16 The AM sanctions Epic Energy's provision of an overrun service in circumstances where the quantity of gas delivered to a shipper at an outlet point exceeds the shipper's daily nominations for that outlet point. Any overrun of the shipper's daily nomination is to be charged at the highest bid price for spot capacity or, if no bid price is available, the minimum price at which Epic Energy was prepared to allocate spot capacity on the day.
- 4.17 A different and, in Epic Energy's view, more flexible, overrun scheme is provided in the proposed DBNGP Access Arrangement. In accordance with this scheme, a shipper overruns when the total quantity of gas delivered to it at a delivery point exceeds the shipper's delivery point MDQ. Overrun is then to be paid for as follows:
 - if the total quantity of gas delivered to the shipper is within the shipper's MDQ, if the overrun is at a delivery point in a zone in which the shipper has more than one delivery point MDQ, and if the total quantity of gas delivered to the shipper in that zone is less than the shipper's aggregate delivery point MDQ in the zone, then no further charges (other than the additional compressor fuel charge) are payable by the shipper;
 - if the total quantity of gas delivered to the shipper is within the shipper's MDQ, if the overrun is at a delivery point in a zone in which the shipper has only one delivery point MDQ, and if the shipper has a delivery point MDQ (or MDQs) in a zone upstream of the zone in which the overrun occurs, then the shipper is to pay additional capacity charges as if the capacity had been relocated downstream from the unutilised delivery point MDQ, calculated at 110% of the capacity charge rates which would otherwise have been payable;
 - if the total quantity of gas delivered to the shipper exceeds the shipper's MDQ, the shipper is to pay the greater of:
 - 110% of the capacity charges and the gas receipt charges which would otherwise have been payable for gas delivered in excess of the shipper's delivery point MDQ; and
 - 110% of the highest price (or its equivalent based on the location of the delivery point) paid on the secondary market on that day; and

- the compressor fuel charge and the delivery point charge in accordance with the tariff schedule.
- 4.18 Unlike the scheme of the AM, in which overrun is a quantity of gas delivered in excess of nomination, the proposed DBNGP Access Arrangement treats overrun as excess over contracted capacity. Again, unlike the scheme of the AM, the proposed Access Arrangement recognises the shipper's rights to what it has contracted for (see paragraph 4.7 above). If a shipper overruns at a delivery point, but does not exceed its total contracted capacity, no additional charges are payable beyond those associated with relocation of capacity which would otherwise not have been used.
- 4.19 If, however, a shipper exceeds its total contracted capacity, the overrun is payable at charges which include a premium of 10% above the capacity and gas receipt charges determined from the appropriate charge rates of the tariff schedule. This premium should provide shippers with an incentive to manage their use of capacity. If additional capacity is required, that capacity can be obtained, at prices which are likely to be lower than might otherwise be the case, in the secondary market which is to be created by proposed Access Arrangement.
- 4.20 Epic Energy notes that the 10% premium is small when compared to the overrun premia possible under the overrun charge formula of the access arrangement approved by the Regulator for the Parmelia Pipeline. It is also small when compared to the premium in overrun charges (143% above the proposed throughput tariff) the Regulator has indicated he is prepared to accept in his Draft Decision on the access arrangement for the Tubridgi Pipeline System. Furthermore, the additional revenue generated by the 10% premium of the proposed DBNGP Access Arrangement is to be treated as rebateable revenue and, longer term, may have the effect of lowering shippers' costs of gas transportation. This is not the case with any additional revenues from overrun under the AM.
- 4.21 Both the AM and the proposed DBNGP Access Arrangement allow Epic Energy to formally notify shippers that overrun is totally or partially unavailable. Under the AM, a shipper is liable to Epic Energy for any direct damage suffered by Epic Energy as a result of the shipper failing to comply with an unavailability notice. Under the proposed Access Arrangement, the shipper is liable for all loss or damage (including indirect loss) suffered by Epic energy or another shipper, and must pay an unavailability charge for each GJ of gas taken in excess of the limit specified in the unavailability notice. As noted in section 3.4 of Epic Energy Submission 7: Reference Tariff and Incentive Mechanism, Epic Energy intends that revenue from the unavailability charge be treated as rebateable revenue.
- 4.22 The proposed DBNGP Access Arrangement advances a scheme for curtailment and interruption which, operationally, is considerably simpler than the scheme of the AM. Under the scheme of the proposed Access Arrangement, Epic Energy can curtail or interrupt in the event of force majeure. It can also curtail or interrupt a shipper's capacity for any reason, including the need to carry out maintenance activity or to undertake major work, provided that the interruption is within the permissible limit of 1% of the



shipper's MDQ multiplied by the number of days in the year. Under the scheme of the AM, Epic Energy may curtail a shipper's capacity in accordance with the curtailment plans specified in some detail in clauses 15 and 16 of the Schedule. Epic Energy may also wholly or partially curtail or interrupt, under the AM, to undertake any major works, and in the event of force majeure. In the event of force majeure, Epic Energy is not liable to shippers for direct damage if the accumulated durations of curtailments of T1 capacity does not exceed 2% of the year, and is not liable if the accumulated durations of interruptions of T2 capacity does not exceed 8% of the year.

4.23 Both the AM and the proposed DBNGP Access Arrangement anticipate multiple shippers using some of the receipt points and delivery points on the DBNGP. The schemes they provide for apportioning gas flows between shippers using these multishipper receipt and delivery points are quite similar.



5. Technical Matters (including Gas Quality)

- 5.1 Technical matters dealt with in some detail in the AM include:
 - SCADA;
 - standards;
 - gas specification; and
 - metering

In its dealing with these matters, the proposed DBNGP Access Arrangement is less prescriptive.

- 5.2 Although the AM explicitly requires that Epic Energy procure and install a supervisory control and data acquisition ("SCADA") system, and operate and maintain that system to the standards of a reasonable and prudent person, there is no equivalent provision in the proposed Access Arrangement. Nor, in Epic Energy's view, should there be. A SCADA system is just one of many physical facilities used to provide a gas transportation service. There can be no specific reason for it being isolated and given prominence in the proposed Access Arrangement ahead of all other facilities that comprise an operating transmission pipeline system. The Code simply does not deal with matters at this level of detail. It anticipates that a reasonable and prudent service provider will install whatever facilities are required to enable third party access. The requirement, in the AM, for a SCADA system carries over a requirement from an earlier, highly prescriptive access regime. It is one of many examples of the AM, and the standard access contract of its Schedule, retaining elements of its origins in the Gas Transmission Regulations 1994 which gave effect to the access regime implemented through the Gas Corporation 1994. Many of these elements were unnecessary at the time they were first introduced. They are now inappropriate in the context of the Code and commercial pipeline operators such as Epic Energy.
- 5.3 Similar comments can be made concerning the general requirement to conform to good engineering practice and standards set out in clause 66 of the AM. There is no equivalent requirement in the proposed DBNGP Access Arrangement. Nor should there be. The fundamental objective of third party access is the creation of rights to access to monopoly facilities on conditions that are fair and reasonable for both service providers and users. This end will be secured by careful specification of the service to be provided to users, and by avoidance of monopoly rent in the price for provision of that service. It will not be secured through regulation of the inputs to service provision because the links between these inputs and the services provided from them are, to a degree, firm-specific, and not well understood outside of the context in which they have been developed. Furthermore, as a commercial entity, Epic Energy is dependent on a pipeline system which continues to provide reliable service to shippers. It is in Epic Energy's own interest to conform to industry standards and good engineering practice to maintain its revenue stream over the long term.
- 5.4 The AM and the proposed DBNGP Access Arrangement contain similar provisions dealing with gas specification (including specification of minimum and maximum temperatures and pressures at which gas may be delivered).

However, the proposed Access Arrangement excludes a number of the "regulatory" provisions of the AM. More importantly, the AM does not provide a financial penalty for unauthorised entry of out-of-specification gas into the DBNGP (although provisions are in place for the introduction of such a penalty, and Epic Energy would move to introduce one if the AM were to remain in effect). A financial penalty for unauthorised entry of out-of-specification gas into the DBNGP is included in the proposed Access Arrangement. Revenue from that penalty (the out-of-specification gas charge) is intended by Epic Energy to be rebateable revenue, and is not simply a "revenue raiser" (see section 3.4 of *Epic Energy Submission 7: Reference Tariff and Incentive Mechanism*).

- 5.5 The proposed DBNGP Access Arrangement permits Epic Energy to impose a surcharge on a shipper responsible for out-of-specification gas entering the DBNGP. That surcharge, the out-of-specification gas charge, is \$15/GJ of out-of-specification gas.
- 5.6 Given the importance of gas measurement to both the physical operation of a pipeline system, and to commercial operations, the fact the AM and the proposed DBNGP Access Arrangement have very similar metering provisions should not be surprising. The three principal differences between the two sets of provisions are the additional provisions in the AM dealing with:
 - a shipper's right to detach and remove metering equipment at the end of the access contract;
 - Epic Energy's obligation to make available to a shipper direct access to signals from outlet metering equipment; and
 - check metering equipment.
- 5.7 The first of these differences a shipper being permitted to detach and remove metering equipment at the end of the access contract may be appropriate in the context of the arrangements of the AM. Clause 142(2) of the Schedule to the AM provides for an outlet station being installed, operated and maintained by Epic Energy at the shipper's expense. It is not appropriate in the context of the proposed DBNGP Access Arrangement. Under the proposed Access Arrangement, the cost of providing delivery point facilities is borne by Epic Energy, and recovered through the delivery point charge of the reference tariff.
- 5.8 In the context of the AM, Epic Energy's obligation to make available to a shipper direct access to signals from outlet metering equipment is a regulatory requirement carrying over from the *Gas Transmission Regulations* 1994. In practice, making signals available from metering requires a detailed technical knowledge of metering electronics, and of shipper facilities to receive such signals. Only large shippers with strong technical capability (for example, Western Power Corporation) have sought direct access to signals from metering. In consequence, Epic Energy has not included direct access to signals as a requirement under the access contract of the proposed Access Arrangement. It does, however, remain a non-reference option which can be requested by a shipper. Were direct access to signals



required, Epic Energy would, as part of its "serving the customer", negotiate with the shipper on making them available.

5.9 The AM's permitting either party to install check metering equipment at its own expense is another regulatory requirement carrying over from the *Gas Transmission Regulations 1994*. Since 1994, no shipper has installed check metering equipment at a delivery point. This is not surprising. The AM includes detailed provisions governing metering standards and testing rights which obviate the need for check metering. These provisions have been carried over into the proposed DBNGP Access Arrangement. Epic Energy does not see provisions requiring check metering as being necessary in the proposed Access Arrangement, and has not included them. Were a shipper to consider check metering to be a worthwhile investment, Epic Energy would, as part of its "serving the customer", negotiate arrangements for its installation.



6. Access Terms and Conditions

- 6.1 Similar general terms and conditions of contract are set out in the Schedule to the AM and in the proposed DBNGP Access Arrangement. These cover:
 - control, possession and title to gas;
 - representations and warranties (by Epic Energy and by the shipper);
 - ascertaining the commercial status and creditworthiness of the shipper;
 - insurances;
 - force majeure;
 - liability;
 - default and termination:
 - invoicing and payment;
 - dispute resolution;
 - records and information;
 - no waiver;
 - entire agreement;
 - severability;
 - entry and inspection;
 - ownership, control, maintenance and risk;
 - no common carriage;
 - Epic Energy not a supplier of gas;
 - stamp duty;
 - no third party benefit; and
 - assignment
- Again, the proposed DBNGP Access Arrangement presents a more concise and commercially focused scheme. The proposed Access Arrangement, unlike the AM, does not continue to carry forward into the future all elements of the earlier, and highly prescriptive, access regime of the *Gas Corporation Act 1994* and the *Gas Transmission Regulations 1994*. It does not, for example, impose on shippers (or prospective shippers) the obligation to assist in securing necessary approvals under environmental and safety laws for the purpose of developing pipeline capacity. Epic Energy expects that such assistance would be forthcoming from a shipper entering into an access contract which requires the development of facilities to meet that shipper's gas transportation requirements.

Acceptance of Gas

6.3 The scheme of the AM whereby Epic Energy is obliged to accept gas in quantities up to the shipper's daily nomination at a receipt point, but may refuse to accept that gas in certain defined circumstances (gas is out of specification, breach, default, force majeure, safety) has not been retained in the proposed DBNGP Access Arrangement. Other provisions of the proposed Access Arrangement operate to ensure Epic Energy's acceptance of gas from shippers.



Liability – Curtailment/Interruption

- 6.4 A major difference in the two contractual schemes is to be found in their liability provisions. This difference is in the extent to which Epic Energy can curtail or interrupt without liability. Under the scheme of the AM, Epic Energy can curtail or interrupt a shipper without liability for direct damage if:
 - the accumulated duration of the curtailments (excluding any curtailments for major maintenance or for force majeure) of the shipper's T1 capacity exceeds 2% of the year; or
 - the accumulated duration of the interruptions (excluding any interruptions for major maintenance or for force majeure) of the shipper's T2 capacity exceeds 8% of the year.
- 6.5 The proposed DBNGP Access Arrangement also places a limit on Epic Energy's right to curtail or interrupt a shipper without liability, but the limit is determined in a very different way.
- 6.6 Under the proposed Access Arrangement Epic Energy can curtail or interrupt a shipper without liability provided that the curtailment or interruption is within the permissible limit. The permissible limit for a year is set at 1% of a shipper's MDQ multiplied by the number of days in that year. In the case of a shipper with contracted capacity of 50 TJ/day, the permissible limit in a year of 365 days would be 182.5 TJ. If this shipper were affected by a curtailment or interruption, Epic Energy would be liable (for the direct losses suffered) if the quantity of curtailed or interrupted capacity in the year exceeded 182.5 TJ, or 1% of the shipper's contracted capacity.
- 6.7 The determination of the maximum extent to which Epic Energy can curtail (or interrupt) a shipper's capacity without liability is, under the proposed DBNGP Access Arrangement, based on volume. Under the AM, it is based on time. The curtailment/interruption limits of the two contractual schemes are, therefore, not directly comparable. Under the AM, Epic Energy can curtail T1 capacity for a total of 7.3 days in any year, and can interrupt T2 capacity for a total of 29.2 days in a year. With an average T1 capacity of 503 TJ/d, Epic Energy could, over a 7.3 day period, curtail a maximum of 3,671.90 TJ of firm service. With an average T2 capacity of 67 TJ/day, it could, over a 29.2 day period, interrupt a maximum of 1,912.6 TJ. If, under the proposed Access Arrangement, all firm service shippers were affected by curtailment or interruption, Epic Energy could curtail all of the capacity available for firm service for a total of 3.65 days. Epic Energy would be liable to shippers (for direct losses they suffered) only when the total quantity of curtailed or interrupted capacity in the year exceeded 2,208.25 TJ.

Options to Extend

6.8 Unlike the AM, the proposed DBNGP Access Arrangement does not explicitly provide for the granting of options to extend an access contract. However, the scheme of capacity expansion options Epic Energy has indicated it may introduce (see section 8 below) provides an alternative and, in Epic Energy's view, more flexible, way of securing future rights to capacity in advance of termination of an existing access contract.



Confidentiality

6.9 Included in the terms and conditions of the proposed DBNGP Access Arrangement is an obligation on the parties to keep terms and conditions of an access contract confidential. Although the earlier access regime of the *Gas Transmission Regulations 1994* required that access contracts be publicly available, this requirement was not carried over into the AM, indicating an intention that AM contracts would be confidential. The absence of an explicit provision in the AM requiring the confidentiality of access contracts was a matter of concern for shippers who saw those contracts as effecting public disclosure of information that could assist potential competitors. Making the requirement for confidentiality explicit in the proposed Access Arrangement removes the ambiguity on this matter inherent in the AM.



7. Access prices

- 7.1 The access pricing of the proposed DBNGP Access Arrangement is significantly different from the arrangements in the AM. The proposed Access Arrangement sets out a detailed scheme of reference tariff principles, and determination of a reference tariff, in accordance with section 8 of the Code. In contrast, the AM continues the pricing (but not the method of price determination) of the earlier access regime of the *Gas Transmission Regulations 1994*, with the level of the tariff, as arbitrarily modified during the DBNGP sale process, at \$1.00/GJ for full haul T1 capacity from 1 January 2000.
- 7.2 The AM tariff for T1 capacity is currently a two part tariff which comprising:
 - a capacity reservation charge per GJ of shipper's reserved capacity (\$0.728029/GJ of reserved capacity from 1 January 2000); and
 - a commodity charge per GJ of throughput (\$0.278401/GJ from 1 January 2001).

In accordance with the pricing principles of the AM, the commodity charge was adjusted at the end of 2000 for changes in Epic Energy's costs of fuel, labour, materials and services, with the adjusted charge having effect from 1 January 2001. (From 1 January 2000, until the adjusted charge came into effect, the commodity charge was \$0.271971/GJ.) With the adjustment, the tariff for full haul T1 capacity (at a load factor of 100%) became \$1.006430/GJ.

- 7.3 A similar two part tariff, but with a lower capacity reservation charge (\$0.691628/GJ of reserved capacity from 1 January 2000), applies to T2 capacity.
- 7.4 The AM tariffs referred to in paragraphs 7.2 and 7.3 above are full haul tariffs. They apply to gas transported from an inlet point located upstream of Compressor Station 9 to an outlet point downstream of that compressor station. There is no discount for a shorter transportation distance when the inlet point is located downstream of Zone 1 (as defined in the proposed DBNGP Access Arrangement).
- 7.5 Under the AM, part haul tariffs are to apply for gas transported from an inlet point located upstream of Compressor Station 9 to an outlet point upstream of that compressor station. These part haul tariffs are "distance discounted". The capacity reservation and commodity charge that apply are the amounts obtained from the formula:

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

where

F is the charge that would apply if the service were a full haul service; and D is the distance (in kilometres of pipeline) between the relevant inlet point and relevant outlet point.

- 7.6 A different structure of prices will apply if the proposed DBNGP Access Arrangement is approved. Epic Energy has previously noted, in section 6 of its *Submission No. 3*, that Schedule 39 of the DBNGP Asset Sale Agreement anticipated a shift from distance-based to zonal tariffs, and adoption of a multi-part tariff. The subsequent adoption of both of these aspects of tariff structure in the reference tariff of the proposed Access Arrangement (albeit in a more developed form than was anticipated in the Asset Sale Agreement), is consistent with the Code's requirement for efficiency in the reference tariff.
- 7.7 Under the proposed DBNGP Access Arrangement, the Pipeline is divided into 10 zones for pricing purposes (with Zone 1 having two subzones). A shipper pays a pipeline capacity charge for each zone (including the zone containing the receipt point, and the zone containing the delivery point) through which its gas is transported.
- 7.8 A compression capacity charge is payable for each compressor station located between the shipper's receipt point and its delivery point. In addition, shippers pay, for each of these compressor stations, a compressor fuel charge which is related to the volume of gas transported through the station.
- 7.9 The reference tariff structure of the proposed Access Arrangement recovers the capital costs of metering facilities through delivery point charges.
- 7.10 The pipeline capacity charge, compression capacity charge, compressor fuel charge and delivery point charge have been designed to recover costs of providing, operating and maintaining the pipeline system. Costs not specifically attributable to pipeline facilities, compression plant and metering are to be recovered through the gas receipt charge of the reference tariff of the proposed DBNGP Access Arrangement. The gas receipt charge recovers costs which are fixed, or semi-fixed, in that they do not vary with throughput.
- 7.11 When combined with a multi-part tariff of the type proposed by Epic Energy for the DBNGP, zone based tariffs ensure that a shipper pays only for those Pipeline facilities used to transport gas from its receipt point to its delivery point. The reference tariff of the proposed Access Arrangement is a more cost reflect tariff than the tariff of the AM.
- 7.12 Epic Energy notes that the capacity-related charges of the proposed DBNGP Access Arrangement the pipeline capacity charge, the compression capacity charge, and the gas receipt charge are all to be payable in arrears. The capacity-related charge of the AM the capacity reservation charge is payable in advance.
- 7.13 Both Submission No. 3, and Epic Energy's Submission 7: Reference Tariff and Incentive Mechanism, address a number of the issues on tariffs raised by shippers and others in their submissions to the Regulator on the proposed DBNGP Access Arrangement.



8. Capacity Trading and the Secondary Market

- 8.1 Both the AM and the proposed DBNGP Access Arrangement provide for capacity trading through the mechanism of a bare transfer (as defined in the Code).
- 8.2 Both also include arrangements whereby unutilised capacity can be made available to shippers day by day. These arrangements the arrangements for spot capacity under the AM, and the secondary market of the proposed Access Arrangement are significantly different in concept and in terms of the way in which they impact on the cost of gas transportation.
- 8.3 The secondary market of the proposed DBNGP Access Arrangement, and shipper concerns about the way in which that market would operate, have been discussed in Epic Energy's *Additional Paper 2: Secondary Market Issues*. The principal conclusions reached in that paper are set out in the paragraphs which follow.
- 8.4 Under the arrangement of the AM, shippers can nominate, at the scheduled times for submission of initial nominations and renominations, for capacity required on a day in excess of their contracted capacities. If unutilised capacity is available, Epic Energy may allocate that capacity to the shippers nominating for spot capacity, the allocation being to those shippers bidding the highest prices above Epic Energy's quoted minimum price for the day. Although a part of the unutilised capacity available for allocation will derive from unutilised contracted capacity and from uncontracted firm capacity, the capacity allocated as spot capacity is fully interruptible.
- 8.5 The secondary market arrangements of the proposed DBNGP Access Arrangement allow shippers with unutilised contracted capacity to offer that capacity for sale on a daily basis (although not necessarily day by day as noted below in paragraph 8.6), and allow Epic Energy to offer for sale any uncontracted firm capacity it may have available. The "commodity" traded in the secondary market is, therefore, firm capacity.
- 8.6 To ensure that shippers have maximum flexibility, capacity can be sold or purchased in the secondary market at any time during the day (even during the last hour of the day), and capacity which has been purchased can be resold. In addition, the SMR allow shippers to post capacity for sale not only on the day ahead, but also on future days. Provided it has been offered, capacity can be purchased in advance for use in the future. Furthermore, shippers selling and requiring capacity can stand in the market with or for that capacity.
- 8.7 The prices at which capacity will be traded in the secondary market will be determined by demand and supply conditions in that market from day to day, and during each day. Secondary market service is effectively take-or-pay, rather than "pay for what you use" (as might be the case with a fully interruptible service). However, shippers can reduce the cost of using secondary market service by managing their secondary market transactions. As noted in paragraph 8.6 above, provided capacity is offered for sale through the secondary market, it can be purchased at any time during the day. Furthermore, provided there are buyers in the market, a shipper that



has purchased secondary market capacity earlier in the day can, on finding that capacity surplus to its requirements, resell the capacity. There is no requirement for a shipper to purchase secondary market capacity before the start of a day and to hold that capacity for the full day.

8.8 Epic Energy's secondary market arrangements complement the trading policy of the proposed DBNGP Access Arrangement. They are a flexible scheme for the transfer of unutilised capacity to shippers requiring additional capacity. As Epic Energy explained in Additional Paper 2, the secondary market arrangements should facilitate additional capacity being made available, at market determined prices, to those who require it. This should be of particular benefit to shippers who have unutilised capacity available for short periods, or who have available only small quantities of unutilised capacity. They will not need to incur the costs of seeking out and contracting with trading partners. It should also be of benefit to those who require additional capacity at short notice. More importantly, through the creation of an effective secondary market, shippers should expect to see prices for unutilised capacity that are significantly lower than the price of spot capacity under the AM (and lower than price of AT3 capacity under the access regime of the Gas Transmission Regulations 1994).

epicenergy

PROPOSED ACCESS ARRANGEMENT Additional Paper 8: Comparison with Access Manual

9. Concluding Comments

- 9.1 An examination of the comparison in the attachments which follow reveals a large number of differences between the provisions of the AM and of the proposed DBNGP Access Arrangement.
- 9.2 As has been noted earlier in this paper, many of these differences are a result of context. The AM derives from, and retains, many of the elements of the earlier, highly prescriptive, access regime of the *Gas Transmission Regulations 1994*. In Epic Energy's view, these elements are no longer required in the context of the Code, a regulator (there was no regulator under the regime of the *Gas Transmission Regulations*), and commercial pipeline operations. Many of the "regulatory" provisions of the AM have not been carried over into the proposed DBNGP Access Arrangement.
- 9.3 Once these regulatory provisions are set aside, there are important similarities between the AM and the proposed Access Arrangement. The AM and the proposed Access Arrangement have broadly similar provisions governing:
 - the gaining of access to capacity;
 - pipeline operations;
 - technical matters (in particular, gas quality and metering);
 - general terms and conditions of contract; and
 - capacity trading through bare transfers.
- 9.4 There are also significant differences, which have been discussed at length, both in this paper and in other Additional Papers and Submissions Epic Energy has lodged with the Regulator. The principal differences between the AM and the proposed DBNGP Access Arrangement are in:
 - The definition and determination of pipeline capacity;
 - MDQs, and not nominations, governing rights to capacity on a day under the proposed Access Arrangement;
 - Arrangements for the relocation of capacity and overrun;
 - Balancing and peaking provisions;
 - Zone based, multi-part cost-reflective pricing in the proposed Access Arrangement;
 - The secondary market of the proposed Access Arrangement; and
 - The potential availability of capacity expansion options under the proposed Access Arrangement.
- 9.5 Not all of these differences may be seen as being of immediate benefit to all shippers. The balancing and peaking limits of the proposed DBNGP Access Arrangement are tighter than those of the AM, and where the AM allowed only for the possibility of penalties in the event of these limits being breached, there are penalties for breach under the proposed Access Arrangement (although, as indicated, Epic Energy would propose to change the AM to include similar surcharges). Furthermore, the more cost-reflective pricing of the proposed Access Arrangement results in tariffs which are higher than the corresponding distance-related part haul tariffs of the AM.



- 9.6 However, these, and other differences not necessarily perceived as being of immediate benefit, must be weighed against:
 - a change in the method of determining capacity available for firm service, and the introduction of a secondary market, which will result in better utilisation of the capacity of the DBNGP, and the lowering costs to shippers in the longer term without reducing the quality of the gas transportation service they receive;
 - greater operational flexibility from less restrictive nominations procedures, easier relocation of capacity, and the ability to overrun without penalty within the limits of shipper's MDQ;
 - the introduction of capacity expansion options which should facilitate longer term planning of the use of capacity by both shippers and Epic Energy.
- 9.7 Epic Energy is firmly of the view that, overall, the proposed DBNGP Access Arrangement will provide shippers with access to gas transportation in a way which will better meets their needs than either the transitional access regime and its AM, or the prior access regime of the *Gas Transmission Regulations* 1994.



Attachment 1: Pipeline Capacity

ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Tranches and T1 and T2 cutoffs

DBPRs 10 - 13 and AM 64

Full haul capacity of DBNGP divided into Tranche 1, Tranche 2, and Tranche 3.

Tranche 1 comprises the portion of full haul capacity that lies between zero and the T1 cutoff.

Tranche 2 comprises the portion of full haul capacity that lies between the T1 cutoff and the T2 cutoff.

Tranche 3 capacity is the portion of full haul capacity that is not Tranche 1 or Tranche 2.

There is a T1 cutoff and a T2 cutoff for each of summer and winter.

Recalculation of the level for a cutoff to be on the basis that:

- probability of supply at T1 cutoff is as close as practicable to 98%;
- probability of supply at T2 cutoff is as close as practicable to 92%.

Tranche 1 is firm capacity, and Tranche 2 and Tranche 3 are each non-firm capacity.

Capacity for firm service and non reference services

AAI 2.1(b)(ii)

Pipeline capacity, determined assuming January conditions, is the capacity made available to users of firm service.

During the remaining eleven months, capacity will usually be higher than the firm service capacity, and the difference can be made available to shippers as seasonal service which, if required by shippers, will be on the same terms and conditions as firm service. This will allow shippers to better "shape" their contracted capacities to match changing gas demand during the year.



Attachment 2: Gaining Access to Capacity

ACCESS MANUAL PROPOSED ACCESS ARRANGEMENT Access by access contract **Access contract** AM 18 AA 5.2(d) Access to capacity requires an access If Epic Energy accepts an access request contract. in the manner set out in the AG, then an access contract between Epic Energy and the prospective shipper is formed which is binding on both parties. Request for advanced information Information requests and reports AM 29 AG 2.4 Information can be requested from an A prospective shipper is encouraged to applicant to assist Epic Energy with its consult with Epic Energy on available forecasting and planning. capacity and facilities prior to making an access request. Where consultation requires extensive investigation and/or reports, the prospective shipper may be required to pay for such investigations and/or reports. Approved prospective shipper Approved parties AM 19 AG 12 A party may be designated an approved Epic Energy may approve a party as an prospective shipper – a party with whom approved third party – a party capable of Epic Energy would enter into an access meeting its contractual obligations to Epic contract if spare pipeline capacity were Energy. The fundamental requirement is available. creditworthiness. A request for approved prospective Application is by submission of approved shipper status is to set out such of the third party request form (AG, Annexure information required for an application as 2). Epic Energy reasonably requires. An approved prospective shipper may An approved third party may participate in submit an application for capacity with a the secondary market. reduced lead time. (AM 25(1)) Epic Energy may require an additional An approved prospective shipper may information from time to time in order to enter into capacity trading as a replacement shipper. (AM 54, 55) verify ongoing status as approved third party. Approved third party status remains current for one year from the date of approval. At least 30 days prior to expiry, approved

third party must submit a new request form for assessment by Epic Energy.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Application at applicant's expense

AM 20

When requested, the applicant must reimburse Epic Energy for all reasonable expenses incurred by reason of the application.

Parties may agree on any terms and conditions

AM 22

The terms and conditions of an access contract for T1 or T2 capacity are to be those of the Schedule to the AM unless the parties agree to the contrary.

Flexible start and end times *AM 23*

Epic Energy and the applicant may agree to include in an access contract mechanisms providing for flexible start and end times.

Minimum contract duration *AM 24*

Minimum duration of an access contract for Tranche 1 or Tranche 2 capacity is 3 months.

Lead times for applications *AM 25*

An application for access to spare capacity is to be submitted at least 30 days before requested start time.

If the applicant is an approved prospective shipper, the application may be submitted no later than 12:00 hours on the sixth working day before the requested start time.

An application for developable capacity must be submitted a reasonable time before the requested start time.

Access request to be accompanied by prescribed fee

AA 5.1(c) and AG 2.1(b)

An access request is to be accompanied by a non-refundable prescribed fee of \$5,000.

AA 6.1(b)(I)

Epic Energy is prepared to negotiate (subject to operational availability) regarding any other service or element of a service sought by a prospective shipper.

Minimum term for firm service AA 6.2(b)

Minimum term for a contract for firm service is 5 years.

Access request for reference service AG 2.2 and 2.3

An access request for a reference service or a non-reference service must be lodged at least 30 days before the requested commencement date.

An access request for a reference service which may require expansion or enhancement of the DBNGP must be submitted a reasonable time before the requested commencement date.



ACCESS MANUAL	PROPOSED ACCESS ARRANGEMENT
Requirements for application AM 26	Access request form AG 2.1 and Annexure 1
Applicant's name and address.	Applicant's name, ACN and address.
Principal place of business, facsimile number, telephone number.	Telephone number and facsimile number.
Name of and contact details for nominated liaison officer.	Name of nominated representative.
Start and end times.	Start date and end date.
Options to extend.	
Inlet and outlet points.	Receipt and delivery points.
Gas quality, temperature and pressure.	
Applicant's load characteristics.	
Capacities at each inlet and outlet point in each season.	Requested delivery point MDQs.
Information on legal status and financial position.	Latest set of audited accounts and (if applicable) articles of association.
Information on trustee or agent status of applicant.	
Details of applicant's insurances.	
If applicable, details of joint venture arrangements.	If applicable, details of joint venture arrangements (AG 13).
	In addition to the matters set out in the AG, Epic Energy may request such further detail and information from a prospective shipper as Epic Energy reasonably considers necessary to assess the prospective shipper's access request. (AA 5.2(d))
Withdrawal of application AM 27	Withdrawal of access request AG 2.5
Application may be withdrawn at any time before access contract is entered into, and application's priority is lost.	Access request may be withdrawn at any time before it is accepted by Epic Energy; any refund of the prescribed fee is entirely at Epic Energy's discretion.
First come first served AM 31	Queuing policy AA 5.3
Processing of applications in an order which reflects the priority of those applications.	Access requests to have priority determined by the order in which they are received.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

First come first served

continued

Priority determined by the order in which applications are received.

The priority of a rejected application is lost.

The simultaneous processing of applications is not precluded.

Conditions precedent *AM 32*

There is sufficient spare capacity, or any necessary expansion of the DBNGP, before the requested start time, is technically and economically feasible.

Each inlet and outlet point will be able to accommodate the maximum flow.

The modification of an inlet point, outlet station, outlet point or physical gate point before the start time, where requested by the applicant, is technically and economically feasible.

Gas delivered to the inlet point complies with requirements regarding gas quality.

Compliance with Epic Energy's reasonable requirements regarding legal status.

Applicant is, to Epic Energy's satisfaction, in a position to meet its obligations under an access contract, or can provide security for those obligations satisfactory to Epic Energy.

Compliance with requirements regarding insurances.

Compliance with requirements regarding metering.

The access contract can be accommodated having regard to the load characteristics set out in the application.

Queuing policy

continued

The priority of a rejected access request is lost.

Epic Energy may deal with access requests out of order provided that the access requests which were first in time are not ultimately disadvantaged.

Acceptance of Access Request AA 5.2 and AG 3.1

There is sufficient spare capacity, or enhancement or expansion of the DBNGP is consistent with Epic Energy's extensions and expansions policy.

The requested capacity can be accommodated having regard to the load characteristics set out in the access request and the load characteristics of other shippers.

Prospective shipper is, to Epic Energy's satisfaction, in a position to meet its obligations under the access contract.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Conditions precedent

continued

Agreement has been reached concerning terms and conditions proposed in the application, or requested by Epic Energy in relation to a relocation of capacity upstream of Compressor Station 9.

Epic Energy may in its discretion as a reasonable and prudent person waive one or more of the conditions precedent.

Assessment of compliance with conditions precedent

AM 34

Epic Energy must investigate to the standard expected of a reasonable and prudent person concerning whether the applicant satisfies the conditions precedent.

Non-compliance

AM36

Notice of non-compliance to be given if application fails to comply with one or more of the conditions precedent.

If requested by the applicant, Epic Energy must provide in reasonable detail information regarding the basis of the determination of non-compliance.

Applicant may elect to amend AM 37

If issued with a notice of non-compliance, applicant may, within 30 days, elect to enter into negotiations to amend the application; if notice is not given, the application is rejected and its priority is lost.

Acceptance of Access Request continued

Agreement has been reached concerning terms and conditions for each non-reference service.

Criteria for assessment of applications

AA 5.2

Epic Energy will assess an access request as a reasonable and prudent pipeline operator.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Application deemed rejected after 90 days

AM 38

Unless an access contract is entered into, an application is taken to be rejected after 90 days from the date of a notice of noncompliance, and the application's priority is lost.

Amendment of Application AM 39 and 40

Epic Energy and the applicant may negotiate and agree to amend the application in any manner; negotiations to amend do not affect the application's priority.

If the amended application is not materially different from the original application, the amended application has the same priority as the original application.

If an amended application is materially different from the original application, if because of that difference an application with lower priority is materially prejudiced, and if the original application can be construed as a combination of the original application and a notional supplementary application, the original application retains its priority, and the notional supplementary application has priority according to the time of amendment. Otherwise, the original application is rejected and the applicant is considered as having resubmitted the application, with the amended application having priority according to the time of amendment.

Access offer and access contract AM 42

Epic Energy must within 3 working days after deciding to enter into an access contract, give an access offer to the applicant.

Amended Access Request AG 2.6

A prospective shipper may amend an access request at any time prior to its acceptance by Epic Energy.

If the amendment is limited to a reduction in the amount of requested capacity, a change in the requested commencement date, or is not in Epic Energy's opinion a material change to the access request, the amended access request will maintain its position in the relevant queue.

In all other cases, if the amended access request is materially different from the original access request to the extent that another prospective shipper has an access request which is materially prejudiced, the amended access request will be deemed to have been lodged on the date on which it is received by Epic Energy.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Access offer and access contract continued

An access offer must be on materially the same terms as those requested in the application.

Epic Energy and the applicant will not be taken to have entered into an access contract until the applicant has duly executed the offer.

If after 20 working days from receipt of the access offer the applicant has not executed it or requested amendments to the application, the applicant is taken to have withdrawn the application.

Conditional access contract AM 43

An applicant may request a conditional access contract.

Epic Energy may enter into a conditional access contract.

A conditional access contract must specify the conditions precedent applicable to the access contract, and must specify a time before which Epic Energy must be satisfied that the conditions precedent have been met.

If, within the time limit specified, Epic Energy is satisfied that the conditions precedent have been met, it must notify the recipient of the conditional access contract that the access contract is unconditional.

When an access offer is to be given AM 33

If an applicant requests T1 capacity, Epic Energy must give the applicant an access offer for T1 capacity.

If an applicant requests T2 capacity, there will be spare capacity in Tranche 2, and there will be no spare capacity in Tranche 1, then Epic Energy must give the applicant an access offer for T2 capacity.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Assessment of compliance with conditions precedent AM 34

Epic Energy must undertake an investigation of the standard expected of a reasonable and prudent person concerning whether the applicant satisfies the conditions precedent for an access contract.

Surcharge may be agreed AM 35

If Epic Energy determines that any enhancement to or expansion of the DBNGP, or the provision of a new, or modification of an existing, inlet point, inlet station, outlet station, or outlet point is not technically and economically feasible, Epic Energy may agree with the applicant that the applicant is to pay a surcharge for the requested capacity.

A surcharge may not exceed the amount necessary to make the provision of the developable capacity or a new or modified inlet point, inlet station, outlet station or outlet point technically and economically feasible and, unless Epic Energy and the applicant agree to the contrary, may not be increased during the duration of the access contract.

Unless Epic Energy and the applicant agree to the contrary, a surcharge is to be reduced if utilisation of the capacity created is providing Epic Energy with a reasonable rate of return independently of the surcharge.

AA Paragraph 12

Epic Energy may from time to time seek surcharges or capital contributions from prospective shippers in respect of new facilities investment.

Capacity expansion options AA 5.3(e),12 and AG 8

Epic Energy may from time to time offer capacity expansion options to assist prospective shippers with their gas transportation requirements.

A capacity expansion option will give the holder a priority right to call on Epic Energy to provide capacity in the DBNGP on the terms, conditions and price set out in the capacity expansion option.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Capacity expansion options continued

A capacity expansion option will have a purchase price to be determined by Epic Energy and is able to be traded by prospective shippers.

Capacity expansion options are to be processed independently of and stand apart from any other access requests, and will receive priority to prospective shippers in the queue.

Relinquishment of capacity *AM 44 – 51*

A shipper may offer to relinquish all or part of its contracted capacity by giving notice to Epic Energy.

Epic Energy must use reasonable endeavours to ensure that other shippers are notified of the current total of relinquishable capacity at approximately the same time.

Epic Energy may at any time give notice to a relinquishing shipper accepting its relinquishment offer.

A relinquishment acceptance may be given in respect of all or part of any relinquishable capacity.

Epic Energy's discretion in determining whether or not to give a relinquishment acceptance is to be absolute and unfettered.

Epic Energy must seek to avoid unnecessary expansion costs in choosing between giving a relinquishment acceptance and providing developable capacity.



Attachment 3: Operational Arrangements

ACCESS MANUAL **PROPOSED ACCESS ARRANGEMENT** Electronic bulletin board AG 11 AM 68 Shippers and prospective shippers will be Epic Energy and shippers may, from time to time, agree on modifications to the Epic provided with access to Epic Energy's Energy's electronic bulletin board system electronic bulletin board. for communication under the access regime. The Epic Energy may provide any person The electronic bulletin board is a gateway with a reasonable degree of access to the for shippers to obtain information about electronic bulletin board, or to those parts the DBNGP, and allows shippers to of the bulletin board which do not contain communicate with Epic Energy on confidential information. The Epic Energy operations. It is the means of lodging and must provide the Coordinator of Energy, amending operations. or any other person specified by the Coordinator, with a reasonable degree of access to the electronic bulletin board. Request for advance information AM Schedule 100 ACTC 4.1 Epic Energy may seek information on Epic Energy may request information on likely nominations from shippers to aid likely nominations at Receipt Points and planning and forecasting. Undertakings Delivery Points. Epic Energy will keep the information confidential. as to confidentiality may be given by the Epic Energy. Shipper must in good faith make Shipper shall provide information in good reasonable endeavours to comply. Shipper may, without penalty, make Information provided is not binding and nominations which materially differ from Epic Energy to have no action against a information provided. shipper in the event of the shipper's nominations being materially different. **Bulletins of available capacity** AM Schedule 105 AG 11(b) Epic Energy to make available to Shipper flow data can be obtained from shippers, via its electronic bulletin board, Epic Energy's electronic bulletin board. regular bulletins specifying the amount of Epic Energy will post notices on the capacity anticipated to be available for electronic bulletin board on matters

nomination or renomination.

including available capacity.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Receipt point and delivery point flexibility

AM Schedule 30 - 32

Shipper may, by notice in writing, request a relocation of all or any part of its contracted capacity at an inlet point or an outlet point.

No relocation of capacity if:

- sum (after relocation) of all of shipper's contracted capacities at inlet point to exceed inlet point's physical capacity, or at outlet point to exceed outlet point's physical capacity; or
- change in type (full haul, part haul, back haul); or
- not operationally feasible.

Epic Energy must assess as a reasonable and prudent person, and give notice in writing as soon as practicable as to whether the relocation is prohibited or not prohibited.

If relocation is not prohibited, Epic Energy and shipper must negotiate in good faith regarding amounts payable in respect of:

- facilities which (after the relocation) will be underutilised;
- facilities which will be utilised as a result of the relocation; and
- any increase in Epic Energy's costs resulting from a relocation which results in a lengthened forward haul, or a shortened back haul.

If the parties reach agreement on relocation, the shipper's access contract is to be amended.

ACTC 3

Shipper may supply quantities of gas at any receipt point in Zone 1 on a day (not exceeding, in aggregate across all receipt points, the shippers MDQ), provided it is operationally feasible.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Receipt point and delivery point flexibility continued

Shipper may supply quantities of gas at a receipt point on a day (not exceeding, in aggregate across all receipt points, the shippers MDQ), greater that those quantities specified in the shipper's access contract for the receipt point provided it is operationally feasible.

Shipper may (subject, where necessary, to reaching agreement with other shippers on the allocation of gas), relocate any part of its delivery point MDQ on a spot basis to a delivery point upstream of its contracted delivery point without the prior consent of Epic Energy. The shipper must, as soon as possible, notify Epic Energy of the relocation, and not later than 08:00 hours on the day.

Shipper's ability to relocate delivery point MDQ to an upstream delivery point subject to the rights of other shippers with contracted delivery point MDQ at that delivery point.

Shipper may not relocate any part of its delivery point MDQ downstream of its contracted delivery point MDQ without the prior written agreement of Epic Energy. That agreement will not be unreasonably withheld other than on operational grounds. The shipper acknowledges that the equivalent downstream quantity may be less than the delivery point MDQ it seeks to relocate.

If the shipper relocates some or all of its delivery point MDQ to an upstream delivery point, the charges payable by the shipper shall not change.

If the shipper reaches agreement with Epic Energy to relocated any part of its delivery point MDQ downstream, the charges payable by the shipper will be in accordance with the tariff schedule.

Unless the parties agree in writing to the contrary, no charges are to be reduced as a result of the relocation of capacity

If the relocation of capacity results in a lengthened forward haul or a shortened back haul, the shipper must reimburse Epic Energy for any increase in costs which result from the relocation.

Epic Energy and the shipper may agree to a relocation of capacity which would otherwise be prohibited.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Relocation of part haul and back haul capacities

AM 36, 38

Shipper must not make a short-term relocation of part haul or back haul capacity unless it first reaches agreement with Epic Energy regarding the terms and conditions, including prices, which are to apply.

Use of full haul capacity upstream of CS 9

AM 39

If Epic Energy and the shipper agree, the shipper's full haul capacity may be relocated to an outlet point upstream of CS 9, but the capacity so relocated is to remain on the same terms and conditions as full haul capacity, and to be treated as though it were full haul capacity.

Nominations in good faith

AM Schedule 103

Shippers' advance nominations, initial nominations and renominations must be in good faith. A shipper must nominate for an amount of capacity which is its best estimate as a reasonable and prudent person of the amount of capacity it proposes to utilise.

ACTC 4.4

Shippers' nominations to be in good faith.

If Epic Energy, as a reasonable and prudent pipeline operator, believes that a shipper in not nominating in good faith, it may give a variation notice to the shipper requiring nominations in good faith.

If, after 21 days, the quantity of gas supplied to a receipt point by a shipper issued with a variation notice, or the quantity of gas delivered to the shipper by Epic Energy at a delivery point, varies by more than 10% from the shipper's nomination, the shipper shall pay a nomination surcharge for each GJ of gas in excess of, or below, the nomination.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Nominations in good faith continued

Epic Energy may withdraw the variation notice at any time, and must withdraw the notice if a period of 3 months elapses without the shipper incurring the nomination surcharge.

Nominations need not be at contracted receipt and delivery points

AM Schedule 106

Shipper may nominate or renominate to deliver gas to Epic Energy at an inlet point, or receive gas from Epic Energy at an outlet point, at which the shipper does not have contracted capacity.

Nominations

AM Schedule 108 - 119

Shipper may nominate in advance for any week or month, by submitting nominations no later than 17:00 hours on Wednesday in the week before the nominated week (in the case of a nomination a week in advance), or at least 6 working days before the start of the nominated month (in the case of a nomination a month in advance).

Shipper may, no later than 14:00 hours on any gas day, nominate for the following gas day.

Epic Energy must, by no later than 16:00 hours on each gas day, allocate a daily nomination.

A shipper may once in respect of each renomination time for a gas day, request a variation of its nomination for the day.

The renomination times for each gas day are 07:00 hours (for the gas day about to begin), 12:00 hours, and 20:00 hours.

In response to a renomination received prior to a renomination time, the Epic Energy must use reasonable endeavours to make an allocation within 1 hour after the renomination time.

ACTC 4.2 - 4.3

Shippers to nominate for each day in a nominated week by notice to Epic Energy not later than 17:00 hours on Wednesday in the week before the nominated week.

A shipper may amend its weekly nomination at any time, up to 14:00 hours on the day before the nominated day.

A shipper may exceed its nomination for a day at a delivery point provided that the shipper remains within its delivery point MDQ.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Balancing

AM Schedule 120 - 129

ACTC 6

If a shipper's imbalance on a day is positive, the shipper is deemed to have supplied the quantity of gas comprising the imbalance on the next day in priority to other gas supplied by the shipper at receipt points.

If a shipper's imbalance on a day is negative, the shipper is deemed not to have supplied any gas to Epic Energy at receipt points until the negative imbalance is cleared.

Before 11:00 hours, Epic Energy is to notify shippers of their daily imbalances and accumulated imbalances at the end of the preceding day. Epic Energy will, as soon as it becomes aware of the situation, use its reasonable endeavours to provide a shipper with notice of the shipper's imbalance limit being exceeded.

"Imbalance limit" means 2% of the shipper's MDQ.

Shipper to ensure that the absolute value of its imbalance does not exceed its shipper's imbalance limit.

Until a surcharge is prescribed, a shipper must endeavour to maintain the absolute value of its accumulated imbalance below 8% of the specified quantity (average of shipper's outlet quantities over the immediately preceding 7 days, or shipper's total contracted capacity).

The absolute value of a shipper's accumulated imbalance may exceed 8% of the specified quantity, in which case the shipper is to pay the prescribed surcharge (if any).

Whenever there is a net imbalance between deliveries of gas into, and deliveries of gas from, the DBNGP. Epic Energy may provide or accept the appropriate quantity of gas to remedy the imbalance. Epic Energy is not obliged to provide a gas balancing service to shippers in preference to refusing to accept gas at an inlet point, or refusing to deliver gas at an outlet point.

If the absolute value of a shipper's imbalance at the end of a day exceeds the shipper's imbalance limit, the shipper shall pay the excess imbalance charge for each GJ of gas by which the absolute value of the imbalance exceeds the shipper's imbalance limit.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Balancing Continued

Epic Energy may do all things expected of a reasonable and prudent person to maintain a balance between deliveries of gas into, and deliveries of gas from, the DBNGP, including restricting the quantities of gas it delivers to shippers at outlet points, and restricting the quantities of gas it accepts from shippers at inlet points.

If failure of a shipper's gas supply is anticipated, the parties may agree to increase the prescribed imbalance limit for a short period in order to enable the shipper to deliver additional gas into the DBNGP in advance of that failure.

The parties may agree to allow the shipper, during a failure of its gas supply, to exceed the prescribed imbalance limit.

Shipper may exchange all or part of its accumulated imbalance with another shipper, and may (in writing) notify Epic Energy. On receipt of such a notice, Epic Energy must calculate adjustments to the shipper's accumulated imbalance to reflect the exchange.

If, at the end of a day on which balancing is to be undertaken, a shipper's accumulated imbalance is positive, Epic Energy is to make a compensating payment to the shipper for each gigajoule of the accumulated imbalance at a rate equal to 75% of the cost of gas, and the shipper's accumulated imbalance is to be reset to zero.

If, at the end of a day on which balancing is to be undertaken, a shipper's accumulated imbalance is negative, the shipper is to make a compensating payment to Epic Energy for each gigajoule of the accumulated imbalance at a rate equal to 125% of the cost of gas, and the shipper's accumulated imbalance is to be reset to zero.

If Epic Energy acting as a reasonable and prudent pipeline operator determines that the quantum of a shipper's imbalance is such that the operation or integrity of the DBNGP may be compromised, it may without liability to the shipper:

- refuse to accept gas at a recipt point or to deliver gas at a delivery point;
- take such action as it deems necessary, including curtailing receipts and deliveries of gas.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Balancing Continued

Cashing out of imbalances is to be undertaken:

- if, at the end of the last gas day of a month, the shipper's accumulated imbalance is positive and exceeds the prescribed limit;
- at any time requested by the shipper;
- at the end of the access contract.

Peaking

AM 130 – 133

Until a surcharge is prescribed, a shipper must endeavour to maintain its hourly quantities and peak daily quantities below the prescribed limits.

A shipper's hourly quantities may exceed

- (a) in winter, 125%; and
- (b) in summer, 120%,

of one twenty-fourth of the shipper's contracted capacity, in which case the shipper is to pay the prescribed surcharge (if any).

A shipper's peak daily quantities may exceed

- (c) in winter, 5%; and
- (d) in summer, 3%,

of the shipper's contracted capacity, in which case the shipper is to pay the prescribed surcharge (if any).

Epic Energy, as a reasonable and prudent person, may refuse to accept gas from a shipper at an inlet point, refuse to deliver gas to the shipper at an outlet point, or both, at any time the shipper's hour quantity or peak daily quantity exceeds the relevant prescribed limit.

ACTC 7

A shipper may take hourly deliveries of gas at a delivery point not exceeding 120% of one twenty-fourth of the shipper's delivery point MDQ at that delivery point.

If a shipper exceeds its MHQ, Epic Energy may require the shipper to pay the peaking surcharge for each GJ of gas by which the shipper's MHQ has been exceeded.

Epic Energy may, as a reasonable and prudent pipeline operator and without liability to the shipper, refuse to deliver gas to the shipper at a delivery point at any time the shipper exceeds its MHQ.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Overrun

AM Schedule 33

Epic Energy may provide an overrun service.

If, on any day, the quantity of gas delivered to the shipper at an outlet point exceeds the sum of the shipper's daily nominations for that outlet point, the shipper is to be taken to have used a quantity of overrun equal to the excess.

Overrun is to be charged at:

- the highest price bid for spot capacity on the day; or
- if no bids were made, the minimum price at which Epic Energy was prepared to allocate spot capacity on that day.

ACTC 5

Any gas delivered to a shipper at a delivery point which is in excess of its delivery point MDQ, or any gas delivered at delivery points which in aggregate exceeds the shipper's MDQ, is overrun.

If the aggregate quantity of gas delivered is within the shipper's MDQ, overrun is to be paid for as follows:

- if the overrun is within a zone in which the shipper has more than one delivery point MDQ, and the aggregate quantity of gas delivered to the shipper in that zone is within the shipper's aggregate delivery point MDQ in that zone, then no further charges are payable by the shipper:
- if the overrun is within a zone in which the shipper has only one delivery point MDQ, and the shipper has a delivery point MDQ (or MDQs) in a zone upstream of the zone in which the overrun occurs, then the shipper shall pay additional capacity charges as if the capacity had been relocated downstream from the unutilised delivery point MDQ, calculated at 110% of the capacity charges otherwise payable.

If the aggregate quantity of gas delivered exceeds the shipper's MDQ, the shipper shall pay the greater of:

- 110% of the capacity charges and gas receipt charges which would otherwise be payable for each GJ of gas delivered in excess of the shipper's delivery point MDQ;
- 110% of the highest price (or its equivalent based on the location of the delivery point) paid on the secondary market on that day.

The shipper is liable for the compressor fuel charge and the delivery point charge in accordance with the tariff schedule.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Overrun

Continued

All gas delivered as overrun is to be included in the calculation of the shipper's hourly quantities.

Epic Energy may give notice that overrun is unavailable, or only available to a limited extent.

Epic Energy must use reasonable endeavours to give advance notice of the unavailability or limited availability of overrun.

Shipper must comply with an unavailability notice.

Epic Energy's rights to physically interrupt capacity being taken in excess of sum of a shipper's daily nominations are not limited. A shipper's liability to Epic Energy for any direct damage suffered by Epic Energy as a result of the shipper failing to comply with an unavailability notice is not limited or prejudiced.

Epic Energy may issue a shipper with an unavailability notice stating that Epic Energy can only deliver the quantity of gas set out in the notice.

Overrun is interruptible in the absolute discretion of Epic Energy. If Epic Energy interrupts a first shipper, directly or indirectly as a result of a second shipper taking overrun, then the second shipper is liable for:

- all loss or damage (including indirect loss) suffered by Epic Energy or the first shipper; and
- capacity and receipt charges Epic Energy is required to credit to the first shipper.

If Epic Energy issues an unavailability notice, a shipper taking overrun in excess of the quantity of gas specified in the notice shall pay the unavailability charge for each GJ of the excess.

Curtailment and interruption

AM Schedule 12 - 25

Epic Energy may, in its discretion as a reasonable and prudent person, apportion curtailments or interruptions between all, or any one or more, of: full haul capacity, part haul capacity and back haul capacity.

Any curtailment of a shipper's total T1 capacity is to be conducted in accordance with the curtailment plan set out.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Curtailment and interruption *Continued*

Epic Energy may wholly or partially curtail or interrupt a shipper's capacity to undertake any major works. Epic Energy is not to be liable for any damage suffered by the shipper arising out of any such curtailment or interruption.

If a shipper is affected by any planned curtailment or interruption arising out of any maintenance activity, or any major works, Epic Energy must use reasonable endeavours to consult with the shipper on the scheduling and duration of that curtailment or interruption, to accommodate the shipper's needs, and to minimise its duration and impact.

Epic Energy must use reasonable endeavours to give shippers advance notice of the magnitude, starting time and expected duration of an impending curtailment or interruption.

ACTC 14

Epic Energy may curtail or interrupt without liability to a shipper:

- in such circumstances as Epic Energy considers necessary as a reasonable and prudent pipeline operator provided that the interruption or curtailment is within the permissible limit; or
- force majeure; or
- in the event of the delivery of gas to a shipper with delivery point MDQ at a delivery point as a result of relocation of capacity, to accommodate other shippers with delivery point MDQ at that delivery point.

Epic Energy mail curtail or interrupt a shipper in circumstances which are not a permissible interruption provided that, in each case, Epic Energy:

- compensate the shipper for any direct loss suffered; and
- credit the shipper, in the next invoice, with the receipt charge and the capacity charges applicable to the capacity interrupted or curtailed.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Multi-shipper receipt points and delivery points

AM Schedule 137

Gas streams delivered to a multishipper inlet point are to be commingled at a point or points upstream of the inlet point.

A shipper's proportional share of the commingled inlet stream is to be determined immediately upstream of the inlet point after all gas streams have been commingled, and a shipper's proportional share of the commingled outlet stream at a multishipper outlet point is to be determined immediately downstream of the outlet point.

A shipper's proportional share of the inlet stream at a multishipper inlet point may be determined by agreement between all shippers who deliver gas to that inlet point. A shipper's proportional share in the outlet stream in a capacity service at a multishipper outlet point may be determined by agreement between all shippers who receive gas at that outlet point.

If shippers fail to reach agreement on proportional shares at an inlet point or outlet point, or if a shipper should fail to notify Epic Energy of its proportional share, Epic Energy may determine any necessary proportional share by reference to nominations or otherwise.

ACTC 3.6 - 3.7

Where a single shipper supplies gas to Epic Energy at a receipt point on a day, the shipper is deemed to have supplied all gas at that receipt point for the day.

If more than one shipper supplies gas to Epic Energy at a receipt point on a day, each of those shippers must provide Epic Energy with written confirmation from the producers of the amount of gas supplied by the producers to the shipper at the receipt point, and the confirmed quantity is deemed to be the quantity of gas supplied by the shipper to Epic Energy at the receipt point.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Multi-shipper receipt points and delivery points
Continued

If a shipper fails to provide written confirmation from the producers, the shipper is deemed to have supplied no gas to Epic Energy at the receipt point.

If more than one shipper takes delivery of gas from Epic Energy at a delivery point on a day, then each shipper's proportional share of the gas stream at that delivery point may be determined by agreement between the shippers who take delivery of gas at that delivery point.

If shippers fail to reach agreement on proportional shares at a delivery point, or if a shipper should fail to notify Epic Energy of its proportional share, Epic Energy may determine any necessary proportional share by reference to nominations or otherwise.



4. Technical Matters (including Gas Quality)

ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

SCADA

AM 65

To the extent that it has not already done so, Epic Energy must procure and install a SCADA system, and must operate and maintain that system to standards acceptable to a reasonable and prudent person.

Standards Generally

AM 66

The design, layout, operation and maintenance of, and any other work on any facility connected to, or adjacent to and associated with, the DBNGP must conform to good engineering practice and the standards required by a reasonable and prudent person, and must comply with the requirements of all relevant written laws and all relevant Australia and international standards including, without limitation, AS 2885.

Gas specification

AM 63, AM Schedule 145 - 152

Operating specification as set out in clause 63.

Gas delivered by a shipper at an inlet point, or by Epic Energy at an outlet point, must be free by normal commercial standards from dust and other solid or liquid matters, waxes, gums and gum forming constituents, aromatic hydrocarbons, hydrogen, and mercury which might cause injury to or interfere with the proper operation of any equipment through which it flows. Gas delivered at an inlet point must be free from objectionable odours.

ACTC 2 and Schedule 2

Operating specification set out in Schedule 2

Gas supplied by a shipper at a receipt point or delivered to the shipper by Epic Energy at a delivery point shall be free by normal commercial standards from dust and other solid and liquid matters, waxes, gums and gum forming constituents, aromatic hydrocarbons, hydrogen, mercury and any other substance or thing which might cause injury to or interfere with the proper operation of any equipment through which it flows.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Gas specification

Continued

Subject to any agreement whereby Epic Energy undertakes to accept out-of-specification gas, gas delivered by the shipper to Epic Energy at inlet points, and gas delivered to shippers by Epic Energy at outlet points, must comply with the operating specification for, as the case may be, category B gas or category C gas.

The minimum and maximum temperatures and the minimum and maximum pressures at which the shipper may deliver gas to Epic Energy at an inlet point, and at which Epic Energy may deliver gas to the shipper at an outlet point are:

Inlet point:

minima 0 C, line pressure maxima 45 C, 8480 kPag

Outlet point:

minima 0 C, as specified maxima 45 C, as specified

Subject to any agreement to the contrary, Epic Energy may without penalty refuse to accept out-of-specification gas from a shipper at an inlet point, and a shipper may refuse to accept out-of-specification gas from Epic Energy at an outlet point.

Epic energy may, as a reasonable and prudent person, on any reasonable terms and conditions, agree with a shipper to accept out-of-specification gas from the shipper at an inlet point.

Epic Energy must, before exercising this discretion, have regard to the need to ensure that delivered gas complies with the appropriate specifications, and must have regard to the requirements of all shippers' customers.

In agreeing with a shipper to accept outof-specification gas, Epic Energy accepts such gas at its own risk. Gas supplied by a shipper at a receipt point shall comply with the operating specification for category A gas, and gas delivered to the shipper at a delivery point shall comply with the operating specification for category B gas

The minimum and maximum temperatures and the minimum and maximum pressures at which a shipper may supply gas to Epic Energy at a receipt point, and Epic Energy may deliver gas to a shipper at a delivery point are:

Receipt point:

minima 0 C, line pressure maxima 50 C, MAOP

Delivery point:

minima 0 C, line pressure maxima 50 C, MAOP

Epic Energy may agree with a shipper to accept out-of-specification gas from the shipper prior to that gas entering the DBNGP, on terms and conditions acceptable to Epic Energy.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Gas specification

Continued

If any out-of-specification gas enters the DBNGP without Epic Energy's agreement:

- the shipper is to be liable for any damages arising from that delivery, including indirect damage, and in particular damage arising from liability under the WLPG agreement; and
- Epic Energy is, to the extent necessary to allow it to deal with that gas, relieved of any obligation to deliver gas to the shipper by an amount no greater than the quantity in terajoules of out-of-specification gas which entered the DBNGP.

A shipper may, at its own risk, accept outof-specification gas from Epic Energy at an outlet point, on whatever terms and conditions the shipper and Epic Energy may agree.

If any pricing or other adjustments to be applied on the basis of gas quality are prescribed in the manual, those adjustments apply as terms of the access contract.

Inlet and outlet stations

AM 138 - 144

The site for an inlet station or an outlet station must:

- be within a security fenced enclosure;
- provide vehicle and personnel access;
- provide adequate space for installation of all equipment; and
- have a concrete, sealed or gravel surface to enable access in all weather conditions.

If any out-of-specification gas supplied by a shipper enters the DBNGP without Epic Energy's prior written consent (which consent is in Epic Energy's sole discretion):

- the shipper is to be liable to Epic Energy for any and all loss and damage arising from that delivery, including indirect damage;
- Epic Energy is, to the extent necessary to allow it to deal with that entry of gas, entitled to vent the outof-specification gas, and is relieved of any obligation to deliver gas to the shipper by an amount no greater than the quantity of gas necessarily vented by Epic Energy; and
- the shipper shall pay Epic Energy a surcharge calculated by multiplying each GJ of out-of-specification gas by the out-of-specification gas charge.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Inlet and outlet stations continued

Telemetry, power supply and other sensitive equipment at an inlet station or an outlet station must be located in a weatherproof, secure and ventilated enclosure, with provision to allow for maintenance of equipment in all weather conditions.

Every inlet station and outlet station must provide a means of automatically:

- preventing the reverse flow of gas through the station; and
- stopping or restricting gas flow in the event of any excessive pressure upstream of, or any failure, leak or rupture within or downstream of the station.

Every inlet station must include filters or separators, or both.

An outlet station must, whenever Epic Energy determines it to be necessary, include filters or separators or both.

All facilities upstream from an inlet point or downstream from an outlet point must be electrically isolated from the DBNGP by an isolating joint or flange.

An inlet station is to be installed, operated and maintained by and at the expense of the shipper, or if more than one shipper delivers gas at an inlet station, by and at the expense of those shippers.

An outlet station is to be installed, operated and maintained by Epic Energy at the expense of shippers.

Metering

AM 153 – 168

The shipper must supply, install, operate and maintain inlet metering equipment, and ensure that at all times all data required by Epic Energy is electronically accessible

ACTC 12 and Schedule 3

The shipper shall, after consulting Epic Energy, supply, install, operate and maintain metering equipment immediately upstream of receipt points at which it supplies gas to Epic Energy; and ensure that at all times all data required by Epic Energy from metering equipment at each receipt point is electronically accessible.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Metering Continued

Epic Energy must, at the shipper's expense, supply, install, operate and maintain outlet metering equipment; and calculate and record the quantity of gas delivered to Epic Energy by the shipper, and the quantity of gas delivered to the shipper by Epic Energy.

Primary metering equipment must be designed, adjusted and operated to achieve:

- the best accuracy of measurement which is technically and economically feasible;
- measurement to within a maximum uncertainty of:
 - plus or minus 1% of actual mass flow rate at a minimum of the 95% confidence level for metering equipment with a design flow rate of 5 TJ/d or greater; and
 - plus or minus 2% of actual mass flow rate at a minimum of the 95% confidence level for metering equipment with a design flow rate of less than 5 TJ/d; and
- measurement to within a maximum uncertainty of plus or minus one quarter of one percent of higher heating value at a minimum of the 95% confidence level.

Primary metering equipment must:

- continuously compute and record quantity of gas;
- be of a standard of manufacture acceptable to Epic Energy;
- comply with AS 2885;
- encompass newest proven technology;
- be able to withstand gas flows of up to 120% of design flow;
- provide 4-20 mA data signals; and
- include facilities for electronic data collection.

Epic Energy shall:

- supply, install, operate and maintain metering equipment at each delivery point, and
- calculate and record the quantity of gas supplied to Epic Energy by the shipper, and the quantity of gas delivered to the shipper by Epic Energy.

Metering equipment must be designed, adjusted and operated to achieve:

- the best accuracy of measurement which is technically and economically feasible;
- measurement to within a maximum uncertainty of:
 - plus or minus 1% of actual mass flow rate at a minimum of the 95% confidence level for metering equipment with a design flow rate of 5 TJ/d or greater; and
 - plus or minus 2% of actual mass flow rate at a minimum of the 95% confidence level for metering equipment with a design flow rate of less than 5 TJ/d; and
- measurement to within a maximum uncertainty of plus or minus one quarter of one percent of higher heating value at a minimum of the 95% confidence level.

Metering equipment must:

- continuously compute and record quantity and quality of gas;
- be of a standard of manufacture acceptable to Epic Energy;
- comply with AS 2885;
- encompass newest proven technology;
- be able to withstand gas flows of up to 120% of design flow;
- provide 4-20 mA data signals; and
- include facilities for electronic data collection.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Metering Continued

Primary metering equipment with a design maximum flow rate of 5 TJ/d or more must include:

- alternative metering equipment;
- a means of detecting faults in duty equipment;
- a means of manually switching from duty to alternative equipment.

Inlet metering equipment must provide digital signals associated with valve or other equipment status, and must include components for signalling:

- delivery temperature;
- delivery pressure;
- instantaneous energy flow rate;
- totalised energy flow;
- relative density;
- HHV:
- nitrogen content;
- carbon dioxide content;
- LPG content;
- moisture level; and
- instantaneous hydrocarbon dew point.

Outlet metering equipment may utilise gas quality data from equipment which is not located at the outlet point in question.

Outlet metering equipment must provide digital signals associated with valve or other equipment status, and must include components for signalling:

- delivery temperature;
- delivery pressure;
- instantaneous energy flow rate; and
- totalised energy flow.

Inlet metering equipment is the property of the shipper, and outlet metering equipment is the property of Epic Energy.

Metering equipment with a design maximum flow rate of 5 TJ/d or more must include:

- alternative metering equipment;
- a means of detecting faults in duty equipment;
- a means of manually switching from duty to alternative equipment.

Metering equipment at a receipt point must provide digital signals associated with valve or other equipment status, and must include components for signalling:

- delivery temperature;
- delivery pressure;
- instantaneous energy flow rate;
- totalised energy flow;
- relative density;
- HHV:
- nitrogen content;
- carbon dioxide content;
- LPG content;
- moisture level; and
- instantaneous hydrocarbon dew point.

Delivery point metering equipment may utilise gas quality data from equipment which is not located at the delivery point in question.

Delivery point metering equipment must provide digital signals associated with valve or other equipment status, and must include components for signalling:

- delivery temperature;
- delivery pressure;
- instantaneous energy flow rate; and
- totalised energy flow.

Receipt point metering equipment is the property of the shipper, and delivery point metering equipment is the property of Epic Energy.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Metering Continued

At the end of an access contract, outlet metering equipment is to become the property of the shipper, and may be detached and removed at the expense and risk of the shipper if:

- the shipper has paid for the equipment;
- the equipment is detachable;
- no third party has any interest in the equipment; and
- no third party (including a shipper) is deriving any benefit from the equipment.

Epic Energy must on request from, and at the expense and risk of, the shipper make available to the shipper direct access to signals from outlet metering equipment at an outlet station at associated with an outlet point at which a shipper has contracted capacity.

Epic Energy may modify, or may require the shipper to modify, existing metering equipment to comply with requirements or standards specified by Epic Energy after the equipment was installed. If the modification is necessary to comply with safety laws of general application, or to comply with an amendment to the access regime implementing such laws, the modification is to be made at the shipper's expens e. Otherwise, the modification is to be made at Epic Energy's expense.

Prior to commencing the construction, installation or modification of any inlet metering equipment, and prior to the commissioning of equipment, a shipper must obtain Epic Energy's approval (which may not be unreasonably withheld).

A shipper may at its own expense at an outlet station, and Epic Energy may at its own expense at an inlet station, supply, install, maintain and operate check metering equipment.

Epic Energy may modify, or may require the shipper to modify, existing metering equipment to comply with requirements or standards specified by Epic Energy after the equipment was installed. If the modification is necessary to comply with safety laws of general application, or to comply with an amendment to the Access Arrangement implementing such laws, the modification is to be made at the shipper's expense. Otherwise, the modification is to be made at Epic Energy's expense.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Metering Continued

All primary metering equipment is to be installed in a manner which permits an accurate measurement of the quantity, and (for inlet metering equipment) the quality, of gas delivered, and a ready verification of the accuracy of measurement.

A measurement of the quantity or quality of gas from any primary metering equipment is presumed to be correct. If any two consecutive verifications show any metering equipment to be operating within the prescribed limits of uncertainty, the metering equipment is presumed to have been operating within those prescribed limits throughout the intervening period. These presumptions are to apply until the contrary is shown.

Epic Energy must, at least once each month during the access contract, and may at such greater frequency or on any occasion that either party may request, verify the accuracy of any primary metering equipment in accordance with the procedure described.

If any component of primary metering equipment is found to be defective or otherwise out of service or operating outside the prescribed limits of uncertainty, Epic Energy must at an outlet station, and the shipper must at an inlet station, (and in both cases, at the shipper's expense) either:

- adjust the equipment to read accurately within the prescribed limits of uncertainty; or
- if such adjustment is not possible, replace it with a serviceable component.

All primary metering equipment is to be installed in a manner which permits an accurate measurement of the quantity, and (for receipt point metering equipment) the quality, of gas delivered, and a ready verification of the accuracy of measurement.

A measurement of the quantity or quality of gas from any metering equipment is presumed to be correct. If any two consecutive verifications show any metering equipment to be operating within the prescribed limits of uncertainty, the metering equipment is presumed to have been operating within those prescribed limits throughout the intervening period. These presumptions are to apply until the contrary is shown.

Epic Energy must, at least once each month during the access contract, and may at such greater frequency or on any occasion that either party may request, verify the accuracy of any metering equipment in accordance with the procedure described.

If any component of metering equipment is found to be defective or otherwise out of service or operating outside the prescribed limits of uncertainty, Epic Energy must at a delivery point, and the shipper must at a receipt point, (and in both cases, at the shipper's expense) either:

- adjust the equipment to read accurately within the prescribed limits of uncertainty; or
- if such adjustment is not possible, replace it with a serviceable component.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Metering Continued

If verification reveals that primary metering equipment is measuring the quantity of gas with an inaccuracy greater than the limit of 1.5% or 3%, as appropriate, all measurements affected or potentially affected are to be corrected.

All measurements made prior to the previous verification are taken to be correct. The period between the previous verification and the current verification is to be divided into an earlier period and a later period being:

- if the time at which the primary metering equipment became inaccurate can be established, respectively the period before and the period after that time; or
- if the time at which the primary metering equipment became inaccurate cannot be established, 2 equal periods.

Measurements produced by the primary metering equipment for the earlier period are to be taken to be correct. The measurements for the later period are to be estimated.

Records produced by primary metering equipment which are in paper form are to be retained for 2 years; records in electronic form are to be retained for 5 years.

Each party must, within 10 working days after receipt of a request from the other party, submit to the other party its records and other information produced by, and any calculation and other information derived from, its primary metering equipment for inspection and verification.

If verification reveals that metering equipment is measuring the quantity of gas with an inaccuracy greater than the limit of 1.5% or 3%, as appropriate, all measurements affected or potentially affected are to be corrected.

If, at any time, any of the metering equipment is found to be registering inaccurately, it is to be adjusted as soon as possible to its specification. The readings from that metering equipment are to be corrected for any period of inaccuracy ("correction period") which is known or agreed upon, provided that the correction period will not extend beyond one half of the time elapsed since the previous verification.

Measurements during the correction period are to be determined by Epic Energy on the basis of the best data available, using the first of the following methods which, when considered in the following order, is feasible:

- recordings by any other measuring equipment;
- trend data;
- by making the appropriate correction if the deviation from the accurate reading is ascertainable; or
- by estimation.

Records produced by metering equipment which are in paper form are to be retained for 2 years; records in electronic form are to be retained for 5 years.

Each party must, within 10 working days after receipt of a request from the other party, submit to the other party its records and other information produced by, and any calculation and other information derived from, its metering equipment for inspection and verification.



5. Access Terms and Conditions

ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Parties AM 5

The rights, liabilities, indemnities and obligations of the participants under this contract are to be several (and not joint or joint and several) and are to be in the proportions of their respective proportionate shares.

Control, possession and title to gas DBPRs 25 - 33

Before a shipper can deliver gas into the DBNGP at an inlet point, the shipper is to:

- have title to and possession of the gas; and
- be able to provide, to Epic Energy's satisfaction, evidence of its title to and possession of the gas.

Neither a shipper nor any other person has a claim against Epic Energy in respect of any gas delivered to and received by Epic Energy at an inlet point.

Title to and possession of gas delivered at an inlet point transfer to Epic Energy.

ACTC 9, 10

Shipper warrants that, at the time it supplies gas to Epic Energy at a receipt point, it has good title to the gas free and clear of all liens, encumbrances and claims of any nature inconsistent with Epic Energy's operation of the DBNGP.

Shipper warrants to Epic Energy that shipper:

- is in control and possession of the gas immediately prior to its supply at a receipt point and immediately after its delivery to shipper at delivery point; and
- has legal responsibility and liability for gas while within control and possession of shipper.

Epic Energy will:

- take title to and have custody and control of gas from receipt of gas from shipper at receipt point until delivery of gas to shipper at delivery point; and
- have legal responsibility and liability for gas only while it is within Epic Energy's custody and control.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Control, possession and title to gas Continued

Epic Energy may:

- consume the gas (for any operational or other purpose and before meeting any obligation to deliver gas);
- compress, clean, process, odorize and store the gas; and
- commingle the gas with any other gas in the DBNGP.

Once gas is transferred from a shipper to Epic Energy, the shipper becomes entitled to receive gas from the DBNGP.

The quantity of gas the shipper becomes entitled to receive is a quantity equivalent (in TJ) to the quantity of gas delivered at the inlet point.

An entitlement to receive gas is not reduced by any allowance for:

- gas consumed or otherwise used by Epic Energy in its operation of the DBNGP;
- unaccounted for gas, and gas which leaks or otherwise escapes from the DBNGP.

Accepting and delivering gas

AM Schedule 26 - 29

If a shipper offers gas for delivery at an inlet point, Epic Energy must accept that gas in quantities up to the shipper's daily nomination at the inlet point.

Epic Energy:

- has the right to commingle gas supplied by a shipper with other gas in the DBNGP;
- may compress, cool, heat, clean and apply other processes to gas consistent with its operation of the DBNGP;
- has the right (subject to its contractual obligations) to decide the manner in which it will operate the DBNGP;
- may satisfy its obligation to deliver gas to the shipper by using a gas pipeline other than the DBNGP.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Accepting and delivering gas Continued

Epic Energy may refuse to accept gas from a shipper at an inlet point if:

- gas is out-of specification, or if shipper's inlet station is not connected to Epic Energy's SCADA;
- shipper is in breach of metering obligations;
- shipper is in default;
- epic Energy is relieved from doing so by force majeure;
- Epic Energy considers unsafe to do so:
- acceptance would cause DBNGP MAOP to be exceeded.

Epic Energy may refuse to deliver gas to a shipper at an outlet point if delivering that gas would cause the total quantity of gas delivered to the shipper on the day to exceed the shipper's total contracted capacity for that day.

Representations and warranties

AM Schedule 72 – 73

Epic Energy:

- compliance with environmental and safety laws;
- all authorisations, licences, permits, consents, certificates, authorities and approvals in full force and effect;
- all leases, licences or easements to construct, operate and maintain outlet stations in full force and effect;
- obligations under the access contract are valid, binding and enforceable;
- no immunity from jurisdiction of court or from legal process;
- controls DBNGP:
- access contract does not contravene constituent documents, any law, any obligations by which assets are bound, or cause any limitation on directors' powers to be exceeded;
- obligations to make payments under access contract rank at least equally with all other unsecured and unsubordinated indebtedness.

ACTC 21

Epic Energy:

- compliance with environmental and safety laws;
- obligations under the access contract are valid, binding and enforceable:
- no immunity from jurisdiction of court or from legal process;
- controls DBNGP;
- access contract does not contravene constituent documents, any law, any obligations by which assets are bound, or cause any limitation on directors' powers to be exceeded.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Representations and warranties Continued

Shipper:

- compliance with environmental and safety laws;
- all authorisations, licences, permits, consents, certificates, authorities and approvals in full force and effect;
- all leases, licences or easements to construct, operate and maintain outlet stations in full force and effect;
- obligations under the access contract are valid, binding and enforceable:
- access contract does not contravene constituent documents, any law, any obligations by which assets are bound, or cause any limitation on directors' powers to be exceeded;
- obligations to make payments under access contract rank at least equally with all other unsecured and unsubordinated indebtedness;
- neither shipper nor any of its related bodies corporate is in default under a law affecting them;
- no pending or threatened action affecting shipper or any related bodies corporate before a court, referee, government agency, commission, arbitrator or other tribunal which might materially affect ability to perform obligations under access contract;
- no immunity from jurisdiction of court or from legal process;
- not an agent or trustee (except to the extent disclosed) in relation to access contract or gas to be delivered or received.

Commercial status of shipper AM Schedule 74

Epic Energy may from time to time seek confirmation from a shipper that the shipper is to meet its obligations under the access contract. If the shipper is not in a position to meet its obligations, Epic Energy may require the shipper to provide security for those obligations.

Shipper:

- compliance with environmental and safety laws;
- all leases, licences or easements to construct, operate and maintain all facilities in full force and effect;
- all authorisations, licences, permits, consents, certificates, authorities and approvals in full force and effect;
- obligations under the access contract are valid, binding and enforceable:
- access contract does not contravene constituent documents, any law, any obligations by which assets are bound, or cause any limitation on directors' powers to be exceeded;
- obligations to make payments under access contract rank at least equally with all other unsecured and unsubordinated indebtedness;
- neither shipper nor any of its related bodies corporate is in default under a law affecting them;
- no pending or threatened action affecting shipper or any related bodies corporate before a court, referee, government agency, commission, arbitrator or other tribunal which might materially affect ability to perform obligations under access contract;
- no immunity from jurisdiction of court or from legal process;
- not an agent or trustee (except to the extent disclosed) in relation to access contract or gas to be delivered or received.

Creditworthiness of shipper ACTC 21.3, 21.4

Epic Energy may from time to time seek confirmation from a shipper that the shipper is to meet its obligations under the access contract. If the shipper is not in a position to meet its obligations, Epic Energy may require the shipper to provide security for those obligations.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Insurances

AM Schedule 76

Shipper must procure and maintain at its expense throughout the duration of the access contract:

- worker's compensation insurance;
- property damage insurance;
- liability insurance for such amount as Epic Energy may require.

Shipper to arrange for:

- endorsement on policies for property damage and liability insurance of Epic Energy as insured or coinsured; or
- Epic Energy's interests to be noted on those policies to Epic Energy's satisfaction so that Epic Energy is covered under those policies.

Shipper must provide Epic Energy with certificates of currency of insurances and endorsements.

Force majeure

AM Schedule 54

Parties to access contract excused from performance, and not liable for any failure in carrying out any obligation under the contract if prevented from doing so by force majeure.

A refusal by Epic Energy due to force majeure to accept gas from, or deliver gas to, a shipper is not a curtailment or interruption of a shipper's capacity.

ACTC 23

Shipper must procure and maintain at its expense throughout the duration of the access contract:

- worker's compensation insurance;
- property damage insurance;
- liability insurance for such amount as Epic Energy may require (not exceeding \$100 million indexed for CPI).

Shipper to arrange for Epic Energy's interest to be noted on policies to satisfaction of Epic Energy so that Epic Energy is covered under those policies and for insurers to waive rights of subrogation against Epic Energy.

Shipper shall provide Epic Energy with certificates of currency of insurances and endorsements.

ACTC 15

A party is excused from performance of, and is not liable for any failure in carrying out, any of its obligations under the access contract if it is prevented from doing so by force majeure.

A refusal by Epic Energy due to force majeure to accept gas from, or deliver gas to, a shipper is not a curtailment or interruption of a shipper's capacity.

A shipper is not relieved of its obligation to pay capacity charges by the occurrence of an event of force majeure (whether claimed by Epic Energy or the shipper).



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Liability

AM Schedule 55 - 62

A party who is negligent, or who defaults in respect of its obligations to the other party under the access contract, is liable to the other party for, and is to indemnify the other party against, any direct damage arising out of the negligence or default.

In any year, Epic Energy is liable to a shipper for direct damage caused by a curtailment or interruption of the shipper's capacity only if:

- the accumulated duration of curtailments of the shipper's T1 capacity exceeds 2% of the year, in which case Epic Energy is thereafter to be liable for any curtailment in excess of the 2% limit; or
- the accumulated duration of interruptions of the shipper's T2 capacity exceeds 8% of the year, in which case Epic Energy is thereafter to be liable for any interruption in excess of the 8% limit.

Except as specifically provided for, neither party is to be liable to the other party for indirect damage, however arising. Epic Energy is to indemnify the shipper against all indirect damage (other than is specifically provided for) suffered by Epic Energy; and the shipper is to indemnify Epic Energy against all indirect damage (other than is specifically provided for) suffered by the shipper.

A party who is fraudulent is to be liable to the other party for, and is to indemnify the other party against, any direct damage or indirect damage arising out of fraud. Epic Energy may curtail or interrupt without liability to a shipper:

- in such circumstances as Epic Energy considers necessary as a reasonable and prudent pipeline operator provided that the interruption or curtailment is within the permissible limit; or
- force majeure; or
- in the event of the delivery of gas to a shipper with delivery point MDQ at a delivery point as a result of relocation of capacity, to accommodate other shippers with delivery point MDQ at that delivery point.

Except as specifically provided for neither party is liable to the other party under any circumstances for indirect damage howsoever caused.

A party who is fraudulent or who shows wilful disregard in respect of its obligations to the other party under the access contract is to be liable to the other party for, and is to indemnify the other party against all loss or damage (including indirect damage) caused by the fraud or wilful disregard.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Liability Continued

Epic Energy is not (except in respect of curtailments and interruptions which exceed the specified limits, and in except respect of fraud) liable to the shipper for any loss, injury or damage (including indirect damage) arising out of any approval by Epic Energy of any design, location or construction of, or proposed operating or maintenance procedures associated with the DBNGP.

The shipper alone is liable for any injury to or death of any person employed by the shipper or by any person (other than Epic Energy) contracting with the shipper, and for any loss of or damage to any property of the shipper or of any person (other than Epic Energy) contracting with the shipper.

The shipper must indemnify Epic Energy, and any person (except the shipper) contracting with Epic Energy against all liabilities and expenses in connection with any claim, demand, action or proceeding made or brought by any person in respect of or in relation to any injury, death, loss or damage.

Epic energy's liability to any third person for any injury, death loss or damage suffered by that person is limited to liability arising directly or indirectly from negligence or wilful default by Epic Energy or its servants and agents.

Epic Energy is not (except in respect of fraud) liable to the shipper for any loss, injury or damage (including indirect damage) arising out of any approval by Epic Energy of any design, location or construction of, or proposed operating or maintenance procedures associated with the DBNGP.

The shipper indemnifies Epic Energy, and any person (except the shipper) contracting with Epic Energy, against all liabilities and expenses in connection with any claim, demand, action or proceeding made or brought by any person in respect of or in relation to any injury, death, loss or damage.

Except to the extent caused by Epic energy's negligence, the shipper is liable for any loss or damage which occurs during the duration of the access contract, in or about any receipt point, any delivery point, the DBNGP, or any other premises, facilities or places used for the storage, transportation or delivery of gas received from or delivered to the shipper.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Default and termination

AM Schedule 47 - 52

The shipper is in default under the access contract in any one or more of the following circumstances:

- default in the due and punctual payment of any amount payable under the contract;
- if, without Epic Energy's prior consent, the shipper attempts to sell or part with possession of the whole or a substantial part of its undertaking;
- an insolvency event occurs;
- any adverse change in the business or financial condition of the shipper which could jeopardise its ability to meet its obligations under the access contract; or
- if the shipper is materially in breach of any warranty given to Epic Energy, or if any statement or representation made by the shipper is found to be false or misleading in any material particular.

If the shipper is in default under the access contract, Epic Energy may in its sole discretion:

- refuse to accept gas from the shipper at an inlet point, refuse to deliver gas to the shipper at an outlet point, or reduce or suspend any other service to the shipper until all defaults have been remedied, ceased or removed; or
- terminate the access contract.

ACTC 17

An event of default by the shipper occurs when the shipper:

- suffers an insolvency event;
- defaults in performance of a material obligation and, where the default is capable of being remedied, does not remedy the default within a period of 21 days from the date of a notice from Epic Energy requiring the default to be remedied;
- fails to pay any amount due to Epic Energy.

If an event of default by the shipper occurs, Epic energy may, at its discretion, take one or more of the following actions:

- suspend the service to the shipper while the default continues, and provide a third party with access to the shipper's capacity; or
- terminate the access contract.

The shipper may terminate the access contract if Epic Energy:

 defaults in providing the service to the shipper for 21 consecutive days and does not remedy that default within 48 hours of receipt of a notice from the shipper requiring that default to be remedied; or



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Default and terminationContinued

 otherwise defaults in performance of a material obligation and does not remedy the default within a period of 21 days from the date of a notice from the shipper requiring the default to be remedied or, if the default is not capable of being remedied, adequate compensation paid.

Invoicing and payment AM Schedule 40 – 46

The shipper must, no later than 3 days before the start of a month, pay to Epic Energy in advance all capacity reservation charges payable by it for the month.

Epic Energy must, within 5 working days after the end of a month, provide to a shipper invoices for the month just ended for the commodity charge for the month, and for all other amounts which are payable under the access contract.

The shipper must, within 10 working days of receipt of an invoice, pay to Epic Energy the amount shown on the invoice.

If the shipper fails to make payment by the due date, it must (unless Epic Energy in its absolute discretion waives this requriement) pay interest on the unpaid amount calculated daily at the prescribed rate.

If the shipper disputes any amount set out in an invoice, it must pay the undisputed portion of the amount and, within 10 working days of the date of an invoice, give notice to Epic Energy that it disputes the amount of the invoice, and provide full details of the dispute.

ACTC 8

Epic Energy will provide the shipper with an invoice or invoices for the month just ended the gas receipt charge, the pipeline capacity charge, and the compression capacity charge payable in advance for the next month.

Epic Energy will provide the shipper with an invoice or invoices for the month just ended showing the compressor fuel charge and the delivery point charge for that month, and for all other amounts which are payable under the access contract.

The shipper will pay each invoice by direct payment to a bank account nominated by Epic Energy within 14 days of receipt of the invoice.

If either party fails to pay any amount due, then that party will pay interest on the overdue amount calculated on a daily basis at the corporate overdraft reference rate plus 2% per annum from the due date for payment until the actual payment.

If a shipper disputes part or all of an invoice:

- the shipper shall, within 7 days of receipt of the invoice, notify Epic Energy of the amount in dispute and the reasons for the dispute;
- the shipper shall pay that part of the invoice not in dispute; and
- the shipper may withhold that part of the invoice in dispute.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Invoicing and payment *Continued*

If a party detects any underpayment or overpayment of an invoice, an adjusting payment is to be made by the appropriate party within 10 working days of notice being given. If a shipper has been overcharged or undercharged, and has paid the invoice, then within 14 days after the error has been discovered and the amount has either been agreed by the parties or determined through dispute resolution, either:

- Epic Energy will repay the shipper the amount of the overcharge (together with interest); or
- the shipper will pay Epic Energy the amount of the undercharge (together with interest).

A party may not claim from the other any amount overcharged or undercharged if more than 18 months have elapsed since the invoice in question.

If the shipper disputes all or part of an invoice, the parties will appoint officers to meet and try to resolve the dispute. If the officers are unable to resolve the dispute within 7 days then either party may refer the matter to an independent expert for determination.

Dispute resolution

AM Schedule 63 - 67

If a dispute arises between the parties which remains unresolved for 30 days, authorised officers of the parties are to meet and use their best endeavours to resolve the dispute.

ACTC 18

If a dispute arises between the parties, either party may give the other written notice of the dispute, and each party will appoint a senior manager or executive to meet in an attempt to resolve the dispute.

The senior managers or executives will use their best endeavours to resolve the dispute within a period of 20 business days from receipt of the notice.

If the parties believe that it would be beneficial, and they agree, they may retain the non-binding mediation services of an agreed mediator.

If the dispute remains unresolved after the 20 business days, and the dispute is a technical matter or a financial matter, then either party may require that the dispute be determined by an independent expert.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Dispute resolution

Continued

If the dispute remains unresolved for a further 10 working days:

- if the dispute is a prescribed dispute, it is to be dealt with under the Gas Referee Regulations 1995;
- if the dispute is not a prescribed dispute, either party may require that the dispute be determined by arbitration.

The party wishing to have the dispute determined by an independent expert will given written notice to the other party. The parties will meet to agree upon the identity of the expert, but if they are unable to do so within 20 business days of the notice, then either party may refer that matter:

- if it is a technical matter, to the president of the Institution of Engineers, Australia; or
- if it is a financial matter, to the president of the Institute of Chartered Accountants, Australia,

who will nominate a suitably qualified person to act as the independent expert to determine the dispute.

The independent expert will act as an expert and not as an arbitrator.

The independent expert will make a determination on the dispute and will determine what, if any, adjustments may be necessary between the parties. The determination of the independent expert will be final and binding on the parties.

Records and information

AM Schedule 75

Each party must prepare and maintain proper books, accounts, records, and inventories of matters relating to the access contract, and must retain them for at least 2 years.

No waiver

AM Schedule 77

No failure or delay by a party in exercising its rights under the access contract operates as a waiver of the party's rights or prevents the party from subsequently enforcing any right or treating any breach by the other party as a repudiation of the access contract.

ACTC 22

Epic energy and the shipper shall prepare and maintain proposer books, accounts, records and inventories of all matters relating to the access contract, and shall retain them for at least 5 years.

ACTC 24

No failure or delay by a party in exercising its rights under the access contract operates as a waiver of the party's rights or prevents the party from subsequently enforcing any right or treating any breach by the other party as a repudiation of the access contract.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Entire agreement

AM Schedule 78

The access contract, in conjunction with the access regime, constitutes the entire agreement between the parties on the subject matter of the access contract and supersedes all prior negotiations, representations and agreements between the parties.

Severability

AM Schedule 79

If any clause or provision of the access contract is held illegal or unenforceable by any judgement of a referee, court, arbitrator or tribunal having competent jurisdiction, the judgement does not affect the remaining provisions of the contract which remain in full force and effect.

Option to renew contract

AM Schedule 82

The shipper may give notice to Epic Energy that it wishes to exercise an option to extend the access contract if an option has been granted as part of the terms and conditions of the contract.

Entry and inspection

AM Schedule 83

Each party must grant to (or procure for) the other party all reasonable rights of entry for any purpose arising out of the access contract.

ACTC 25

The access contract, in conjunction with the access regime, constitutes the entire agreement between the parties on the subject matter of the access contract and supersedes all prior negotiations, representations and agreements between the parties.

ACTC 26

If any clause or provision of the access contract is held illegal or unenforceable by any judgement of a referee, court, arbitrator or tribunal having competent jurisdiction, the judgement does not affect the remaining provisions of the contract which remain in full force and effect.

ACTC 27

Each party shall grant to, or use its reasonable endeavours to procure for, the other party all reasonable rights of entry for any purpose arising out of the access contract.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Ownership, control, maintenance and risk

AM Schedule 84

In the absence of any agreement between the parties to the contrary, the inlet point and the outlet point mark the boundaries of ownership of all plant, equipment, pipelines and facilities, and the shipper is presumed to own any relevant thing upstream of the inlet point and downstream of the outlet point, and Epic Energy is presumed to own any relevant thing between the inlet point and the outlet point.

In the absence of any agreement between the aprties to the contrary, the responsibility to install, commission, operate and maintain, and the risk in relation to, all plant, equipment, pipelines and facilities follows ownership.

No common carriage

AM Schedule 85

Neither Epic Energy nor the shipper is a common carrier of gas transported through the DBNGP.

Epic Energy not a supplier of backup gas

AM Schedule 86

Nothing in the access regime or the access contract requires Epic Energy to supply gas to a shipper.

Shipper to assist in environmental and safety matters

AM Schedule 87

If the access contract arises from an application for developable capacity, the shipper must provide to Epic Energy and to any other authority or person all reasonable assistance to allow Epic Energy to obtain all necessary approvals under environmental and safety laws.

ACTC 28

In the absence of any agreement between the parties to the contrary, the receipt point and the delivery point mark the boundaries of ownership of all plant, equipment, pipelines and facilities, and the shipper is presumed to own any relevant thing upstream of the receipt point and downstream of the delivery point, and Epic Energy is presumed to own any relevant thing between the receipt point and the delivery point. In the absence of any agreement between the aprties to the contrary, the responsibility to install, commission, operate and maintain, and the risk in relation to, all plant, equipment, pipelines and facilities follows ownership.

ACTC 30

Neither Epic Energy nor the shipper is a common carrier of gas transported through the DBNGP.

ACTC 31

Nothing in the access contract requires Epic Energy to supply gas to the shipper.



ACCESS MANUAL	PROPOSED ACCESS ARRANGEMENT
Stamp duty AM Schedule 88	ACTC 32
The shipper must pay all stamp duty payable in respect of the access contract.	The shipper shall pay all stamp duty payable in respect of the access contract.
No third party benefit AM Schedule 89	ACTC 33
No person other than Epic Energy or the shipper is to obtain any benefit or entitlement under the access contract.	No person other than Epic Energy or the shipper is to obtain any benefit or entitlement under the access contract.
Assignment AM 81	ACTC 19
Either party may, with the prior written consent of the other party, which may not be unreasonably withheld, assign all or part of its rights, interests and obligations under the access contract to any person.	Epic Energy may assign its rights and interest under an access contract without obtaining the consent of the shipper where that assignment is to a related body corporate, or to a person holding an interest in the DBNGP.
	Otherwise, assignment is to be with the consent of the shipper, which consent shall not be unreasonably withheld.
Consent may be withheld until the proposed assignee covenants to make all payments and observe all other obligations under the access contract.	A shipper may undertake a bare transfer for any period without Epic Energy's consent.
	Subject to its rights to trade capacity in the secondary market, a shipper may not otherwise assign or encumber its rights and interest under an access contract without obtaining the prior written consent of Epic Energy which shall not be unreasonably withheld.
Epic Energy must withhold consent to an assignment if it would not enter into the access contract with the proposed assignee under Part 3 of the AM.	
	Confidentiality ACTC 20
	Each party shall (subject to certain exceptions) keep the terms of the access contract, and all information provi ded pursuant to the access contract, confidential.



6. Access Prices

ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Take or pay AM Schedule 10

A shipper's obligation to pay the capacity reservation charges for its T1 capacity, and for its T2 capacity, arises whether or not the shipper makes any use of those capacities.

Prices in 1998 and 1999

AM Schedule 92

Until 08:00 hours on 1 January 2000, shippers are to pay a capacity reservation charge for each gigajoule per day of contracted T1 capacity and T2 capacity. Until 08:00 hours on 1 January 2000, shippers are to pay a commodity charge for each gigajoule per day of gas delivered to an outlet point under each of T1 capacity and T2 capacity.

Renegotiation of prices after Code takes effect

AM Schedule 93

At any time after an access arrangement is approved for the DBNGP, either party may give notice to the other party requesting renegotiation of the prices payable by the shipper.

If notice is given, the parties must, during the following 60 days, negotiate in good faith having regard to the principles of the National Access Code and the prevailing Access Arrangement.

A dispute is to be referred to the arbitrator under the National Access Code, who is to apply the principles of the Code so as to make a determination of the prices to be paid by the shipper.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Prices for T1 and T2 capacity from 1 January 2000

AM Schedule 94

If there is no renegotiation of prices after the Code takes effect, and prices to be paid are not prescribed by regulation, the prices to be paid by a shipper from 08:00 hours on 1 January 2000 until the end of the access contract are to be:

- capacity reservation charge of \$0.728029/GJ per day of shipper's full haul T1 capacity, and \$0.691628/GJ per day of shipper's full haul T2 capacity; and
- commodity charge of \$0.271971/GJ, adjusted from 1 January 2001.

If regulations prescribe the prices to be paid, the shipper is to pay those prices in substitution for the prices set out above.

If there is no renegotiation of prices, Epic Energy may annually adjust the commodity charge to reflect:

- changes in the cost of fuel;
- with respect to labour, materials and services, 75% of an changes in CPI;
- the introduction of any new, or the increase or decrease of any existing, tax excise, impost, levy or charge by the Commonwealth or State Governments, if the tax, excise, impost, levy or charge has general application.

Charges for part haul and back haul capacity

AM Schedule 97

Capacity reservation charges and commodity charges for part haul T1 capacity, part haul T2 capacity; back haul T1 capacity, and back haul T2 capacity are to be a distance-discounted proportion of the corresponding charges for full haul capacity.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Reference tariff policy AA 7, AAI 2

Epic Energy's reference tariff has been designed to recover from shippers using the reference service that portion of the total revenue that reflects:

- those costs which are directly attributable to provision of the reference service; and
- a share of those costs which are attributable to provision of the reference service jointly with other services.

The total revenue has been calculated using the 'cost of service' method described in section 8.4 of the Code.

Epic Energy has allocated costs to firm service shippers on the basis of their use of the assets comprising the DBNGP.

For the purpose of determining the reference tariff for firm service, Epic Energy has divided the DBNGP into 11 Zones.

There are five components to the reference tariff for firm service:

- gas receipt charge;
- pipeline capacity charge;
- compression capacity charge for compressor stations other than compressor Stations 1 and 2);
- compressor fuel charge;
- delivery point charge.

The pipeline capacity charge recovers from each firm service shipper, on the basis of that shipper's MDQ as a proportion of the sum of the MDQs of all firm service shippers in the zone, a proportion of the return and depreciation on, and a proportion of the non-capital costs incurred in operating and maintaining:

- the pipeline assets in the zone in which the shipper's receipt point is located;
- the pipeline assets in the zone in which the shipper's delivery points are located;



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Reference tariff policy continued

- the pipeline assets in the zones located between the zone in which the shipper's receipt point is located and the zone in which the shipper's delivery point is located;
- compressor station assets at Compressor Stations 1 and 2; and
- facilities associated with the delivery points (but only in respect of noncapital costs incurred in operating and maintaining such facilities).

The compression capacity charge recovers from each firm service shipper, on the basis of that shipper's MDQ as a proportion of the sum of the MDQs of all firm service shippers using the compressor station, a proportion of the return and depreciation on, and a proportion of the non-capital costs incurred in, maintaining every compressor station (other than Compressor Station 1 and Compressor Station 2) located between the shipper's receipt point and the shipper's delivery point.

The compressor fuel charge recovers from each firm service shipper a proportion of the cost of the compressor fuel used at compressor stations located between the shippers receipt point and the shipper's delivery point.

Firm service shippers making upstream deliveries (back hauling) will not incur the compressor fuel charge unless those upstream deliveries cause a change in the normal direction of gas flow in the DBNGP.

The delivery point charge recovers from shippers using a particular delivery point the return on the metering assets at the delivery point and the depreciation on those assets.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Reference tariff policy continued

The gas receipt charge recovers from a firm service shipper, on the basis of that shipper's MDQ as a proportion of the sum of the MDQs of all firm service shippers, a proportion of the return and depreciation on, and a proportion of the non-capital costs incurred in operating and maintaining, other assets, plus other costs associated with providing Firm Service not otherwise recovered by the charges set out above.

Epic Energy has adopted a 'price path' approach as described in section 8.3 of the Code as the manner in which the reference tariff will vary within the access arrangement period. The initial reference tariff will increase at 67% of CPI.

The adoption of the "price path" approach is intended to provide an incentive to develop the market and reduce costs.

The method by which Epic Energy will distribute rebateable revenue is intended to provide an incentive for development of a market for that part of the DBNGP capacity which cannot be made available as firm service.



7. Capacity Trading and the Secondary Market

ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Approval of transfer *AM 54*

Prior to transferring or agreeing to transfer capacity, a shipper must make a written request to the Epic Energy for the approval of the transfer.

Epic Energy may, within 5 working days, notify the shipper that it does not approve the transfer terms, but may do so only if the Pipeline cannot accommodate:

- the transfer of the transfer terms; or
- performance of either or both of the original contract and the replacement contract following the transfer.

Replacement shipper AM 55

Capacity may be transferred only to a person who is, before the transfer, a shipper or an approved prospective shipper.

Posting tradeable capacity *AM 56*

Epic Energy must, if requested, notify all shippers of tradeable capacity which has been approved for transfer.

Replacement contract *AM 58*

Transfer of tradeable capacity an access contract between Epic Energy and replacement shipper.

Replacement contract governed by the terms and conditions of the original contract as amended to accommodate the transfer terms.

Replacement contract to include a provision that the traded capacity is subject to all of Epic Energy's rights over that capacity under the original contract.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Original shipper's access contract *AM 59*

Original shipper's contract remains in full force and effect for duration of replacement contract.

Further marketing service *AM 62*

Epic Energy may, if requested by an original shipper, take steps to market (as a broker but not as a buyer and reseller) tradeable capacity.

Bare transfer

AA 11.1

Epic energy will permit a bare transfer of an access contract in accordance with section 3.10 of the Code.

Conditional transfer

AA 11.2

Epic Energy will permit a conditional transfer in accordance with the ACTC.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Access to spot capacity AM 14 - 16, 24

To obtain spot access (access to unutilised capacity which is made available for a day or part of a day), a shipper must submit an application for capacity.

A prospective shipper may not have access to spot capacity other than under a spot contract.

Unless the prospective shipper and Epic Energy agree to the contrary, a spot contract is to be on the terms and conditions set out in the Schedule to the AM.

Epic Energy may refuse to enter into a spot contract which is for a duration which is less than one day.

Spot capacity

AM Schedule 101, 109, 111

If on a day the sum of a shipper's initial nominations, advance nominations or renominations exceeds the shipper's total contracted capacity, the shipper is taken to have nominated for an amount of spot capacity equal to the amount of the excess.

Whenever Epic Energy considers it necessary to do so, it may interrupt, after giving the required notice, either wholly or in part, any spot capacity allocated to a shipper, and may do so before curtailing or interrupting any shipper's contracted capacity or any shipper's spot capacity. If a shipper's initial nomination includes a nomination for any spot capacity, the

nomination for any spot capacity, the nomination is to include a bid of the price the shipper will pay for that capacity, and the nomination is not valid unless the price bid is equal to or higher than the minimum price specified by Epic Energy in its most recent bulletin of available capacity.

The spot charge payable for spot capacity allocated by Epic Energy is to be the price bid for that capacity in the shipper's initial nomination or renomination.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Spot capacity

Continued

If there is insufficient capacity to meet all valid nominations for spot capacity on a day:

- it is to be allocated to the bidder or bidders of the highest price or, if there is insufficient capacity to do so, it is to be apportioned between them on a pro rata basis by reference to the quantity of spot capacity nominate by each; and
- any remainder is to be allocated to the next highest bidder or bidders, and so on until all available spot capacity is allocated.

To the extent that a shipper does not utilise its spot capacity:

- if Epic Energy could have received revenue from an allocation of the capacity to another shipper as spot capacity, the shipper in question must continue to pay the spot charge in respect of that unutilised capacity; and
- if Epic Energy could not have received revenue from allocation of the capacity to another shipper as spot capacity, the shipper in question is excused from paying the spot charge in respect of the unutilised capacity.

Secondary Market AA 11.3, SMR 1

Epic Energy will establish a secondary market.

Secondary market service will be available on the secondary market and may be provided by either Epic Energy or a firm service shipper.

The terms and conditions of secondary market service will be the same as the ACTC except as expressly modified by the SMR.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Secondary market continued

The establishment of the secondary market will provide an opportunity for all holders of firm service to post their willingness to sell anticipated unutilised capacity for a day. Epic Energy will also post uncontracted capacity for a day.

Epic Energy will not make an interruptible service or an authorised overrun service available to shippers. A shipper's requirements over and above its contracted capacity will need to be met from the secondary market. In that market, capacity can be acquired at any time during the day.

Parties wishing to purchase capacity in the secondary market must be either existing shippers or approved third parties.

Participation in the secondary market SMR 2

Only shippers holding eligible capacity may post capacity for sale on the secondary market, and only eligible capacity may be posted for sale.

Eligible capacity: firm service capacity, capacity under a secondary market contract, or capacity under a non-reference service contract where Epic Energy and the shipper have agreed a mechanism for trading the capacity on the secondary market.

By posting capacity for sale on or selling capacity through the secondary market, the shipper is deemed to have agreed to be bound by the secondary market rules.

Only the following persons may purchase capacity through the secondary market:

- a holder of eligible capacity;
- Epic Energy;
- a shipper under an access contract issued under a prior access regime;
- an approved third party.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Secondary market continued

By bidding for capacity or posting an offer to purchase capacity on the secondary market, an eligible buyer is deemed to have agreed to be bound by the secondary market rules.

Operation of the secondary market SMR 4

Epic Energy will operate the secondary market through the secondary market system in accordance with the SMR.

The secondary market system shall form part of Epic Energy's customer reporting system.

An eligible seller shall send a positing for sale notification on the secondary market system setting out, among other things, the quantity being posted for each delivery point and the price for each quantity.

An eligible purchaser shall send a posting for purchase notification on the secondary market system setting out, among other things, the capacity being sought and the maximum price to be paid.

Epic Energy is only able to post for sale on the secondary market capacity that is uncontracted capacity. The price bid shall be neither lower than the floor price (as defined), nor higher than the ceiling price (as defined).

At the closing time for a stand in the market bid, the secondary market system will determine:

- in the case of a bid to purchase, the bid with the lowest price at or below the maximum price specified in the stand in the market bid;
- in the case of a bid to sell, the bid with the highest price at or above the minimum price specified in the stand in the market bid,

and the bid shall be deemed to be the bid accepted by the stand in the market bid.



ACCESS MANUAL

PROPOSED ACCESS ARRANGEMENT

Operation of the secondary market continued

In the case of sale bids which are not stand in the market bids, the secondary market system shall allocate the successful sale bids as being accepted by the purchase request.

Successful sale bids are those, starting with the sale bid with the lowest price bid and working up, until the aggregate quantity of such sale bids equals the quantity specified in the purchase request.

In the case of purchase bids which are not stand in the market bids, the secondary market system shall allocate the successful purchase bids as being accepted by the sale request.

Successful purchase bids are those, starting with the purchase bid with the highest bid price and working down, until the aggregate quantity of such purchase bids equals the quantity specified in the sale request.

Upon notification being made by the secondary market system, the successful purchaser shall be deemed to have a secondary market service contract from Epic energy for the day, and the quantity specified in the notification, on the secondary market terms and conditions.