Attachment 1
Response to Draft Decision Amendment 55 – Key Performance Indicators

Draft Decision Amendment 55

In the Draft Decision the Regulator at Amendment 55 stated the following:

'*The Access Arrangement Information should be amended to include the following Key Performance Indicators for the Access Arrangement Period:*

Pipeline maintenance cost ($ per km of pipeline).
Compression maintenance cost ($ per MW installed).
Compression unit reliability (ratio of out of service hours to total hours).
Compressor unit utilisation (ratio of run hours to total hours).
Pipeline utilisation (ratio of average throughput to maximum capacity).
Capacity reservation utilisation (ratio of average throughput to capacity reservation).
Compressor fuel usage (ratio of compressor fuel to throughput).
Maintenance cost ratio (ratio of operation and maintenance cost to total operating expenditure excluding fuel).
Overhead cost ratio (ratio of overheads to total operating costs excluding fuel).
Delivery cost (ratio of total operating costs excluding fuel to total quantity delivered).
Gas unaccounted for (volume of gas unaccounted for as a percentage of total delivery).
Delivery disruption (disrupted quantity as a percentage of total MDQ)'.

Epic Energy Response

Epic Energy reiterates its views (as contained in the revised access arrangement information document filed on 28 July 2000) on the relevance of KPIs for shippers and prospective shippers.

However, in the event that the Regulator is not convinced about the merits of Epic Energy's arguments about the relevance of KPIs in general, Epic Energy provides the following response to each of the Regulator's suggested Key Performance Indicators contained in Amendment 55.

Before responding to each KPI individually, there are two overarching issues that need to be raised and which apply to all of the proposed KPIs. First and foremost, the Regulator has not demonstrated in the draft decision why each of them is reasonable and required to be included. The only reason specified in the draft decision is that the Code requires for KPIs to be included in the access arrangement information. However, this fails to demonstrate the reasonableness of each of the KPIs proposed. Epic Energy repeats its prior request that the Regulator outline his reasoning in this respect as soon as possible.

Second, the Regulator has not proposed the values to be included in the KPIs. As Epic Energy has stated on prior occasions, there are valid questions about the utility of developing KPIs for the purposes of creating benchmarks to be determined by reference to other pipelines because of the different circumstances of each pipeline. To date, the Regulator has approached his assessment of the access arrangement on a theoretical basis, assuming a notional project specific pipeline operating in a theoretically (perfect) competitive environment. The court in the DBNGP decision, rejected this approach in so far as the need to replicate perfect competition is concerned. On that basis, the Regulator must, in setting any values for any KPIs he considers should be included in an access arrangement information, take into account the specific circumstances of the Service Provider and the pipeline concerned or at least the pipeline he has based his initial capital base on).

Epic Energy now responds to each of the proposed KPIs individually.

1. Pipeline maintenance cost ($ per km of pipeline):

1.1 In Epic Energy's view this KPI has no value and can cause misleading information on cost efficiencies. This is so for the following reasons:

1.2 First, maintenance cost can vary dramatically depending on location and other factors like environmental factors and the biological diversity of the terrain being traversed from the north to the south west of WA. For example, maintenance costs per km for a section of pipeline that is in good soil and readily accessible area is very different to the maintenance costs for a pipeline of the same length in a flood prone and inaccessible area. The DBNGP is a combination of rural [pastoral], broad rural [agricultural] and suburban [metropolitan built up areas] pipelines all with very different pipeline maintenance needs. The areas where changes hence pipeline maintenance costs are much more significant are in the suburban areas compared with broad rural and rural areas. Furthermore, the maintenance needs vary widely within suburban areas.

1.3 Second, it must be noted that pipeline maintenance costs include the costs of maintaining both the pipeline and the right of way, together with access licence fees, bores, roads, MLVs and SCADA. However, it does not include Meter Station and Compressor Station maintenance costs, which are all costs required to be incurred for the purposes of providing services on the pipeline system. While the regulator has proposed separate KPIs for compressor maintenance costs, given the reasons below in relation to that KPI, its reliability must also be questioned.

1.4 Third, some of the cost items categorized as pipeline maintenance costs are not costs over which Epic Energy has any control. Examples of such cost items are the pipeline licence fee and charges imposed by the Minister for access rights granted over the DBNGP corridor pursuant to section 34 of the *Dampier to Bunbury Pipeline Act 1998*. Shire rates and land related tax/fees are also costs over which Epic Energy has no control and these too are included in 'Pipeline Maintenance Costs'.

1.5 Fourth, certain maintenance costs that Epic Energy has included for the DBNGP access arrangement are not costs which are incurred by other pipeliners. An example of this is the Access Licence fee levied pursuant to section 34 of the *Dampier to Bunbury Pipeline Act* – the DBNGP is the only pipeline in Australia that has this fee levied on it. Similarly, other pipeliners incur maintenance costs which are not incurred by Epic Energy for the DBNGP. To create a KPI that is to be used as a benchmark for all pipelines based on this comparator therefore becomes extremely misleading and unhelpful to prospective users.

1.6 Serious questions must therefore be raised about the utility of this KPI. Accordingly, Epic Energy does not agree to amend its Access Arrangement information in order to include this KPI for the Access Arrangement Period.

2. Compression maintenance cost ($ per MW installed):

2.1 Epic Energy does not view this KPI as having any value for the following reasons:

2.2 First, all compressor stations are different. The mix of pipe, duty and standby compression and type of compression units within a station will vary not only between pipelines (thus making comparators between other Australian pipelines difficult), but also compressor stations on the DBNGP. It will depend on the contracted service for which compression is required and the expenditure profile favoured by the pipeline owner at the time of construction. Whilst manning requirements costs may be the same, the current combination of compressors on the DBNGP would distort the message that a KPI of this sort would indicate.

2.3 Second, the use of duty/standby compressor units will also distort these costs. A prudent service provider would keep certain items for duty and standby compression however, even

these items require maintenance to ensure their reliability to start when called upon is maintained. This leads to additional maintenance costs.

2.4 Third, the service provider is unable to have total control over when and the manner in which compressors are operated. Compressors will be required to be run at above their optimum rate to maintain pressure on the pipeline as a result of such instances as suppliers not providing gas at receipt points and Users taking more gas at delivery points than they are contractually entitled to. These are matters which, at a particular point in time, are out of the control of the Service Provider and lead therefore to higher running and maintenance costs. As has been previously explained to the regulator, the efficiency of compressor units is compromised if compressors are not run at a steady state.

2.5 As is also the case with this KPI, serious questions must therefore be raised about its utility Accordingly Epic Energy does not agree to amend its Access Arrangement information in order to include this KPI for the Access Arrangement Period.

3. Compression unit reliability (ratio of out of service hours to total hours):

3.1 Epic Energy advises that this KPI is available and believes that it is an important one as the pipeline capacity (whether determined using the average day methodology or the tranche methodology) is related directly to this measure. It will incorporate this into the revised access arrangement documentation to be lodged. However, before doing so, it wishes to discuss the exact form of the KPI with the Regulator.

4. Compressor unit utilisation (ratio of run hours to total hours):

4.1 In Epic Energy's view this KPI is of little value for the following reasons.

4.2 First, the utilisation of compressor units is a function of the services contracted by Users on the system. The nature of the contracted services therefore drive the manner in which Epic Energy must utilise its compressors. This KPI does nothing therefore to measure the service provider's efficiency in utilising the compressor units.

4.3 Second, the DBNGP's rotating plants have included certain "standby" units as part of the system which are provided to secure the current contracted services of T1 capacity. No other pipeline in Australia uses the tranche methodology or the average capacity capacity determination methodologies as the basis for determining their ability to deliver their firm service hence this KPI is very pipeline specific and can not be used for comparison purposes.

4.4 Further this KPI is too dependent on the capex/opex profile (which itself is a function of the services contracted on the pipeline) to be of any use.

4.5 Given the above, it would be misleading to use this KPI as a means of comparing between pipelines without having understood the nature of contracted services on the various pipelines being compared.

4.6 As such Epic Energy does not agree to amend its Access Arrangement information in order to include this KPI for the Access Arrangement Period.

5. Pipeline utilisation (ratio of average throughput to maximum capacity):

5.1 The DBNGP is currently contracted to provide firm T1 capacity, not average or maximum capacity, so any KPI indicator relating to average or maximum capacity in Epic Energy's view has no practical meaning. Even were Epic Energy to move to the average day methodology (as opposed to the average throughput) for determining the pipeline's capacity, this KPI would have no practical meaning.

5.2 Therefore Epic Energy does not agree to amend its Access Arrangement information in order to include this KPI for the Access Arrangement Period.

6. Capacity reservation utilisation (ratio of average throughput to capacity reservation):

6.1 In Epic Energy's view this KPI is of no value as the ratio of throughput to capacity reservation is dictated by the shippers' own business requirements. For example, AlintaGas may want to reserve to their full capacity while peak power suppliers may only want to reserve a lesser capacity but can have much higher throughput.

6.2 As such, Epic Energy does not agree to amend its Access Arrangement information in order to include this KPI for the Access Arrangement Period.

7. Compressor fuel usage (ratio of compressor fuel to throughput):

7.1 Epic Energy considers that this KPI does not provide any indication in relation to the service provider's efficiency of operation of the pipeline nor can it be used to make comparisons between pipelines. This is so for a number of reasons.

7.2 First, a compressor fuel usage rate path (commonly known in the industry as the "fuel curve") will generally be fixed at the time of pipeline construction. It is determined having regard to both the requirements of the Service Provider and foundation customers. For example, the service provider and foundation customers may agree for a variety of reasons to install a small diameter pipeline and few compressor stations and be prepared to live with relatively high fuel cost operating expenditure. However, another owner, expecting future load growth, could install large diameter pipe or more frequent compressor stations, achieving lower fuel consumption for the same throughput. While it can be subsequently modified by the capital/operating expenditure mix, this impact will only be marginal in nature.

7.3 Second, the fuel curve does not necessarily measure fuel efficiency. Compressor fuel does not have a linear relationship with throughput for a pipeline that relies on compression power for capacity like the DBNGP. Compressor fuel moves exponentially as throughput increases. A particular ratio will only be of relevance if throughput remains constant. Further, the target fuel quantity for a pipeline depends on the actual throughput at the time. For a different throughput, the target or ideal efficient operation fuel consumption will change. Therefore, not only is it inappropriate to use such an indicator to compare pipelines, it is also inappropriate to use it for varying throughputs on the same pipeline. This is not a KPI that Epic can use internally, let alone be used by other parties to compare various pipelines.

7.4 Third, this KPI can be significantly distorted by factors such as unexpected bad weather, high imbalance, high peaking and loss of compressors, and fuel ratios for the same throughput may increase due to shippers' behaviour. These factors are to a large extent beyond the control of the Service Provider and further decrease the value of this KPI. As an example, linepack changes can also have a significant impact on fuel usage at any particular time, eg depleting from linepack will reduce fuel consumption dramatically on a day. Over the next few days, linepack will need to be replenished and the extra fuel to re-build linepack vastly outweighs the fuel savings when depleting from linepack.

7.5 As indicated above in relation to the KPI on compressor unit maintenance costs, compressors will be required to be run at above their optimum rate to maintain pressure on the pipeline as a result of such instances as suppliers not providing gas at receipt points and Users taking more gas at delivery points than they are contractually entitled to. These are matters which, at any particular point in time, are out of the control of the Service Provider. As an example, compressors can be operating in ranges of 50 to 60% higher than optimum just to manage imbalances caused by actions of Users.

7.6 Given the above, Epic Energy does not agree to amend its Access Arrangement information in order to include this KPI for the Access Arrangement Period.

8. Maintenance cost ratio (ratio of operation and maintenance cost to total operating expenditure excluding fuel):

8.1 This KPI does not inform the User or Prospective User about the reasonableness of the costs being incurred by a Service Provider any more than what the data already contained in the Access Arrangement Information does. Its utility must be called into question.

8.2 Table 4.1 of the proposed Access Arrangement Information document outlines the categories of non capital costs to be incurred during the access arrangement period. It is evident from these categories as to what costs are overhead costs and what are maintenance and operations costs. If the Regulator is not satisfied that this is the case, Epic Energy would be prepared to provide the necessary clarification.

9. Overhead cost ratio (ratio of overheads to total operating costs excluding fuel):

9.1 Epic Energy's comments in relation to the above KPI apply equally in relation to this KPI.

9.2 Moreover, Epic Energy is uncertain of the value of this KPI given that overhead costs may increase proportionally with total operating costs (for example, during periods when there are higher equipment failures or insurance claims), but the ratio may remain the same. As such this KPI may reflect more about the nature of the company than the reasonableness of the costs being incurred.

9.3 In light of the above, Epic Energy does not agree to amend its Access Arrangement information in order to include this KPI for the Access Arrangement Period.

10. Delivery cost (ratio of total operating costs excluding fuel to total quantity delivered):

10.1 In Epic Energy's view this KPI can be misleading. This is so for the following reasons.

10.2 First, Epic Energy is assuming (although it has no guidance from the Draft Decision) that this KPI was meant to monitor the 'real' costs of operation in relation to throughput by removing fuel costs. If that is the case, it is a misleading measure in that throughput does not necessarily have a direct relationship with real costs of operation for a pipeline that is fully contracted as while there are costs that are related to throughput [ie run hours], there are costs that do not relate to run hours which a Service Provider needs to expend to ensure its contracted capacity is assured when called upon. These are sunk costs which must be spent regardless of the quantity of gas being transported. A large majority of costs incurred in the operation of the DBNGP and other pipelines for that matter are not throughput related and hence are of no value in this KPI.

10.3 Second, as mentioned above on several occasions, there are many items comprising non capital expenditure which are out of the service provider's control but which are directly attributable to the type of service a User has contracted for and the way in which on any particular day, they take gas. For example when imbalance or peaking flows are high, then the operating cost will be higher due to more frequent and volatile compressor operation (which may lead to equipment failure or high maintenance cost and certainly higher fuel costs), but the total quantity of gas delivered may stay the same.

10.4 As a further example, if a customer takes gas on an interruptible basis, this will result in higher operating (and maintenance) costs, even though the total quantities being delivered are the same as if they were delivered on a firm basis.

10.5 A third reason is that the operating costs of pipelines vary depending on a variety of factors, which are never the same for all pipelines. This point is elaborated upon in relation to the pipeline and compressor maintenance cost KPIs above.

10.6 It would be inappropriate to compare pipelines on this basis without understanding the nature of the services contracted on the pipeline, the basis on which gas is delivered and the physical characteristics of each pipeline.

10.7 As such, Epic Energy does not agree to amend its Access Arrangement information in order to include this KPI for the Access Arrangement Period.

11. Gas unaccounted for (volume of gas unaccounted for as a percentage of total delivery):

11.1 Epic Energy notes that GUF is a key measure of how well a Service Provider is meeting its core business obligation of providing a transportation service in that it shows:

(1) whether or not there may be leaks in the pipeline system; and

(2) whether the metering equipment is accurately recording gas received into and delivered out of the pipeline system. It should be noted that a key input to the GUF calculations is the receipt point metering which is designed, specified and maintained by the Producers. This means that to a large extent, the absolute accuracy of this metering is controlled by another party, and therefore can have a large impact on GUF if the equipment is inaccurate. Although Epic Energy does witness accuracy verifications checks of this metering, the inherent inaccuracy is outside of the control of Epic Energy.

11.2 Therefore, Epic Energy does not accept that this KPI should be used as a means of comparing the reasonableness of Epic Energy's operating costs as against other pipelines primarily because each pipeline has a differing number of metering stations and differing metering equipment.

11.3 The ability of a service provider to achieve a near zero GUF level for a pipeline is heavily dependent on a number of factors and including (but not limited to) the number of receipt and delivery points on the system and whether there is any metering equipment from which data is supplied to the Service Provider but which is owned by a third party (such as a metering station owned by a supplier at a receipt point). For a pipeline with one receipt point and say 10 delivery points, the combined inaccuracies of metering errors would be vastly different to the DBNGP which has multiple receipt points and over 40 delivery points.

11.4 Metering equipment will always record gas transported through it with a certain margin of error, the margin being dependent on the type of equipment. Statistically therefore, the service provider operating a pipeline with tens of inlet and outlet stations has more of a chance of achieving near zero GUF due to the diversity of equipment and the averaging of metering errors. Furthermore, such a Service Provider is able to undertake some management of corrective actions to achieve the desired outcome. However, the Service Provider of a pipeline with say one inlet station and two outlet stations has practically no ability of achieving near zero GUF based on a statistical analysis.

11.5 If the Regulator is to persist with this KPI, then he should also set an appropriate range of variability for GUF. This range should be determined by reference to a number of factors, including the number and type of metering stations and which stations are owned by the Service Provider. With all meter stations owned by the Service Provider and metering uncertainties of 0.7-1% of flow rate, a GUF of 0.5+% could be within the range of normal variability.

12. Delivery disruption (disrupted quantity as a percentage of total MDQ):

12.1 This KPI has no value as the level of interruptibility is set when negotiating a service. Therefore, the type of service that parties agree to will already make an allowance for interruption/disruption. While a Service Provider will always endeavour to provide the service

contracted for with as few interruptions as possible, the reference service proposed by Epic Energy is already assuming a very high level of compressor availability.